

***Acinetobacter baumannii* MRSN Diversity Panel**

**Catalog No. NR-52248**

This reagent is the tangible property of the U.S. Government.

**Product Description:**

The *Acinetobacter baumannii* (*A. baumannii*) MRSN strains that comprise NR-52248 were isolated between 2003 and 2017 as part of a surveillance program in the United States.

**Lot: 70048242**

**Manufacturing Date: 2020 and 2021**

QC testing was performed, and the results are provided on the Certificate of Analysis for each isolate.

/Heather Couch/

Heather Couch

08 FEB 2022

Program Manager or designee, ATCC Federal Solutions

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**Acinetobacter baumannii, Strain MRSN 334**

**Catalog No. NR-52148**

This reagent is the tangible property of the U.S. Government.

**Product Description:**

*Acinetobacter baumannii* (*A. baumannii*), strain MRSN 334 was isolated in 2010 from a human respiratory specimen in the United States as part of a global surveillance program. *A. baumannii*, strain MRSN 334 was deposited as sensitive to amikacin, colistin and tobramycin, intermediately resistant to tetracycline and resistant to ceftazidime, ciprofloxacin, ceftriaxone, cefepime, gentamicin, imipenem, trimethoprim/sulfamethoxazole, levofloxacin, meropenem and ampicillin/sulbactam. NR-52148 lot 70038244 was produced by inoculation of the deposited material into Tryptic Soy broth and grown for 1 day at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar kolles, which were grown for 1 day at 37°C in an aerobic atmosphere to produce this lot. Quality control testing was completed under propagation conditions unless otherwise noted.

**Lot: 70038244**

**Manufacturing Date: 20AUG2020**

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TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis</b> Cellular morphology Colony morphology  Growth at 44°C ± 2°C <sup>1</sup> 1 day in an aerobic atmosphere on Tryptic Soy agar Motility Remel™ Motility Test Medium w/TTC Indicator for 1 day at 37°C in an aerobic atmosphere VITEK® MS (MALDI-TOF)	Gram-negative rods Report results  Growth  Report results  <i>A. baumannii</i>	Gram-negative rods Circular, convex, entire, smooth and cream (Figure 1) Growth  Non-motile  <i>A. baumannii</i> (99.9%)
<b>Antibiotic Susceptibility Profile<sup>2,3</sup></b> Amikacin Cefepime Ceftazidime Ciprofloxacin Colistin Gentamicin Imipenem Levofloxacin Meropenem Tobramycin Trimethoprim/sulfamethoxazole Ampicillin/sulbactam Ceftriaxone Tetracycline	Sensitive Resistant Resistant Resistant Sensitive Resistant Resistant Resistant Resistant Resistant Sensitive Resistant Resistant Resistant Resistant Resistant Resistant Resistant Intermediate	Sensitive (≤ 4 to 16 µg/mL) Intermediate to Resistant (24 µg/mL) <sup>4</sup> Resistant (≥ 64 µg/mL) Resistant (≥ 4 µg/mL) Sensitive (≤ 0.5 µg/mL) Resistant (≥ 16 µg/mL) Resistant (> 8 µg/mL) Resistant (> 32 µg/mL) Resistant (≥ 8 µg/mL) Sensitive (≤ 1 µg/mL) Resistant (> 4 µg/mL) Intermediate (6 to 8 µg/mL) <sup>4</sup> Resistant (≥ 64 µg/mL) <b>Resistant (≥ 256 µg/mL)<sup>5</sup></b>
<b>Genotypic Analysis</b> Sequencing of 16S ribosomal RNA gene (1470 base pairs)	≥ 99% sequence identity to <i>A. baumannii</i> , strain MRSN 334 (GenBank: VHFA01000109.1)	99.9% sequence identity to <i>A. baumannii</i> , strain MRSN 334 (GenBank: VHFA01000109.1)

TEST	SPECIFICATIONS	RESULTS
<b>Purity</b> 7 days at 37°C in an aerobic atmosphere with and without 5% CO <sub>2</sub> on Tryptic Soy agar	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology
<b>Viability</b>	Growth	Growth

<sup>1</sup>Growth at 44°C differentiates *A. baumannii* from *A. calcoaceticus* and *A. pittii*, which do not grow at 44°C.

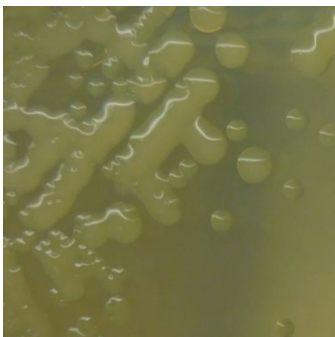
<sup>2</sup>Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S28 (2018)

<sup>3</sup>Antibiotic susceptibility was tested using a combination of VITEK® 2 GN82, Sensititre™ GNX2F AST and E-test strips.

<sup>4</sup>The susceptibility result for this antibiotic is within one doubling dilution of specification, which is considered an equivalent result.

<sup>5</sup>*A. baumannii*, strain MRSN 334 was deposited as intermediately resistant to tetracycline but showed a MIC of ≥ 256 µg/mL (interpreted as resistant) for this antibiotic during QC testing. Testing was performed in duplicate.

**Figure 1: Colony Morphology**



/Heather Couch/  
Heather Couch

03 JUN 2021

Program Manager or designee, ATCC Federal Solutions

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**Acinetobacter baumannii, Strain MRSN 843**

**Catalog No. NR-52149**

This reagent is the tangible property of the U.S. Government.

**Product Description:**

*Acinetobacter baumannii* (*A. baumannii*), strain MRSN 843 was isolated in 2010 from a human wound sample in the United States as part of a global surveillance program. *A. baumannii*, strain MRSN 843 was deposited as multi-locus sequence type (MLST) ST 417, sensitive to amikacin, ampicillin/sulbactam, cefepime, ceftazidime, colistin and imipenem, intermediately resistant to ceftriaxone and tobramycin and resistant to ciprofloxacin, gentamicin, levofloxacin, meropenem, trimethoprim/sulfamethoxazole and tetracycline. NR-52149 was produced by inoculation of the deposited material into Tryptic Soy broth and grown for 1 day at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar kolles, which were grown for 1 day at 37°C in an aerobic atmosphere to produce this lot. Quality control testing was completed under propagation conditions unless otherwise noted.

**Lot: 70038245**

**Manufacturing Date: 19AUG2020**

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TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis</b> Cellular morphology Colony morphology  Growth at 44°C ± 2°C <sup>1</sup> 1 day in an aerobic atmosphere on Tryptic Soy agar Motility BBL™ Motility Test Medium w/TTC Indicator for 1 day at 37°C in an aerobic atmosphere VITEK® GN card VITEK® MS (MALDI-TOF)	Gram-negative rods Report results  Growth  Report results  <i>A. baumannii</i> (≥ 89%) <i>A. baumannii</i>	Gram-negative rods Circular, raised, entire, smooth and cream (Figure 1) Growth  Non-motile  <i>A. baumannii</i> (99%) <i>A. baumannii</i> (99.9%)
<b>Antibiotic Susceptibility Profile<sup>2,3</sup></b> Amikacin Ampicillin/sulbactam Cefepime Ceftriaxone Ceftazidime Ciprofloxacin Colistin Gentamicin Imipenem Levofloxacin Meropenem Trimethoprim/sulfamethoxazole Tobramycin Tetracycline	Sensitive Sensitive Sensitive Intermediate Sensitive Resistant Sensitive Resistant Sensitive Resistant Resistant Resistant Resistant Intermediate Resistant	Sensitive (≤ 4 µg/mL) Sensitive (1.5 to 2 µg/mL) Sensitive (≤ 2 µg/mL) Intermediate (32 µg/mL) Intermediate (16 µg/mL) <sup>4</sup> Resistant (≥ 4 µg/mL) Sensitive (0.125 µg/mL) Resistant (24 to 32 µg/mL) Sensitive (≤ 2 µg/mL) Resistant (> 8 µg/mL) Resistant (8 µg/mL) Resistant (> 4 µg/mL) Intermediate (8 to 12 µg/mL) Resistant (256 µg/mL)
<b>Genotypic Analysis</b> Sequencing of 16S ribosomal RNA gene (~ 1480 base pairs)	≥ 99% sequence identity to <i>A. baumannii</i> , strain MRSN 843 (GenBank: VHDU0100088.1)	100% sequence identity to <i>A. baumannii</i> , strain MRSN 843 (GenBank: VHDU0100088.1)
<b>Purity</b> 7 days at 37°C in an aerobic atmosphere with and without 5% CO <sub>2</sub> on Tryptic Soy agar	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology

TEST	SPECIFICATIONS	RESULTS
Viability	Growth	Growth

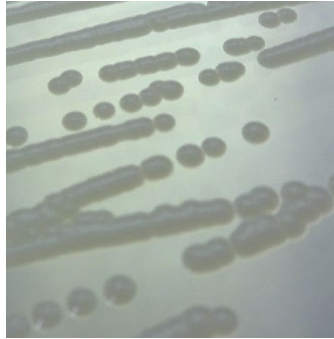
<sup>1</sup>Growth at 44°C differentiates *A. baumannii* from *A. calcoaceticus* and *A. pittii*, which do not grow at 44°C.

<sup>2</sup>Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S28 (2018)

<sup>3</sup>Antibiotic susceptibility was tested using a combination of VITEK<sup>®</sup>2 GN82, Sensititre GNX2F AST and E-test strips.

<sup>4</sup>Susceptibility results for this antibiotic is within one doubling dilution of specification, which is considered an equivalent result.

Figure 1: Colony Morphology



/Heather Couch/  
Heather Couch

05 FEB 2022

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**Acinetobacter baumannii, Strain MRSN 918**

**Catalog No. NR-52150**

This reagent is the tangible property of the U.S. Government.

**Product Description:**

*Acinetobacter baumannii* (*A. baumannii*), strain MRSN 918 was isolated in 2008 from a human wound sample in the USA as part of a global surveillance program. *A. baumannii*, strain MRSN 918 was deposited as sensitive to colistin and tobramycin and resistant to amikacin, ampicillin/sulbactam, cefepime, ceftazidime, ceftriaxone, ciprofloxacin, gentamicin, imipenem, levofloxacin, meropenem, tetracycline and trimethoprim/sulfamethoxazole. NR-52150 lot 70038246 was produced by inoculation of the deposited material into Tryptic Soy broth and grown for 1 day at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar kolles, which were grown for 1 day at 37°C in an aerobic atmosphere to produce this lot. Quality control testing was completed under propagation conditions unless otherwise noted.

**Lot: 70038246**

**Manufacturing Date: 19AUG2020**

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TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis</b> Cellular morphology Colony morphology  Growth at 44°C ± 2°C <sup>1</sup> 1 day in an aerobic atmosphere on Tryptic Soy agar Motility Remel™ Motility Test Medium w/TTC Indicator for 1 day at 37°C in an aerobic atmosphere VITEK® MS (MALDI-TOF) VITEK® 2 (GN card)	Gram-negative rods Report results  Growth  Report results  <i>A. baumannii</i> <i>A. baumannii</i> (≥ 89%)	Gram-negative rods Circular, convex, entire, smooth and cream (Figure 1) Growth  Non-motile  <i>A. baumannii</i> (99.9%) <i>A. baumannii</i> (99%)
<b>Antibiotic Susceptibility Profile<sup>2,3</sup></b> Amikacin Ampicillin/sulbactam Cefepime Ceftriaxone Ceftazidime Ciprofloxacin Colistin Gentamicin Imipenem Levofloxacin Meropenem Trimethoprim/sulfamethoxazole Tobramycin Tetracycline	Resistant Resistant Resistant Resistant Resistant Resistant Resistant Sensitive Resistant Resistant Resistant Resistant Resistant Resistant Sensitive Resistant	Resistant (> 256 µg/mL) Resistant (48 to 64 µg/mL) Resistant (> 256 µg/mL) Resistant (> 32 µg/mL) Resistant (≥ 64 µg/mL) Resistant (≥ 4 µg/mL) Sensitive (≤ 0.25 µg/mL) Resistant (≥ 16 µg/mL) Resistant (> 8 µg/mL) Resistant (8 µg/mL) Resistant (> 8 µg/mL) Resistant (> 4 µg/mL) Sensitive (≤ 1 µg/mL) Resistant (> 256 µg/mL)
<b>Genotypic Analysis</b> Sequencing of 16S ribosomal RNA gene (~ 1380 base pairs)	≥ 99% sequence identity to <i>A. baumannii</i> , strain MRSN 918 (GenBank: VHD01000102.1)	99.9% sequence identity to <i>A. baumannii</i> , strain MRSN 918 (GenBank: VHD01000102.1)
<b>Purity</b> 8 days at 37°C in an aerobic atmosphere with and without 5% CO <sub>2</sub> on Tryptic Soy agar	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology

TEST	SPECIFICATIONS	RESULTS
Viability	Growth	Growth

<sup>1</sup>Growth at 44°C differentiates *A. baumannii* from *A. calcoaceticus* and *A. pittii*, which do not grow at 44°C.

<sup>2</sup>Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S28 (2018)

<sup>3</sup>Antibiotic susceptibility was tested using a combination of VITEK® 2 GN82, Sensititre GNX2F AST and E-test strips.

Figure 1: Colony Morphology



/Heather Couch/  
Heather Couch

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16 NOV 2021

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**Acinetobacter baumannii, Strain MRSN 959**

**Catalog No. NR-52151**

This reagent is the tangible property of the U.S. Government.

**Product Description:**

*Acinetobacter baumannii* (*A. baumannii*), strain MRSN 959 was isolated in 2008 from a human wound in the United States as part of a global surveillance program. *A. baumannii*, strain MRSN 959 was deposited as sensitive to colistin and tetracycline and resistant to amikacin, ceftazidime, ciprofloxacin, ceftriaxone, cefepime, gentamicin, imipenem, trimethoprim/sulfamethoxazole, levofloxacin, meropenem, tobramycin and ampicillin/sulbactam. NR-52151 lot 70038247 was produced by inoculation of the deposited material into Tryptic Soy broth and grown for 1 day at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar kolles, which were grown for 1 day at 37°C in an aerobic atmosphere to produce this lot. Quality control testing was completed under propagation conditions unless otherwise noted.

**Lot: 70038247**

**Manufacturing Date: 26AUG2020**

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TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis</b> Cellular morphology Colony morphology  Growth at 44°C ± 2°C <sup>1</sup> 1 day in an aerobic atmosphere on Tryptic Soy agar Motility BBL™ Motility Test Medium w/TTC Indicator for 1 day at 37°C in an aerobic atmosphere VITEK® GN card VITEK® MS (MALDI-TOF)	Gram-negative rods Report results  Growth  Report results  <i>A. baumannii</i> (≥ 89%) <i>A. baumannii</i>	Gram-negative rods Circular, raised, entire, smooth and cream (Figure 1) Growth  Motile  <i>A. baumannii</i> (99%) <i>A. baumannii</i> (99.9%)
<b>Antibiotic Susceptibility Profile<sup>2,3</sup></b> Amikacin Ampicillin/sulbactam Cefepime Ceftriaxone Ceftazidime Ciprofloxacin Colistin Gentamicin Imipenem Levofloxacin Meropenem Trimethoprim/sulfamethoxazole Tobramycin Tetracycline	Resistant Resistant Resistant Resistant Resistant Resistant Sensitive Resistant Resistant Resistant Resistant Resistant Resistant Resistant Resistant Sensitive	Resistant (> 256 µg/mL) Resistant (256 µg/mL) Resistant (> 256 µg/mL) Resistant (≥ 64 µg/mL) Resistant (≥ 64 µg/mL) Resistant (≥ 4 µg/mL) Sensitive (≤ 0.25 µg/mL) Resistant (≥ 16 µg/mL) Resistant (≥ 8 µg/mL) Resistant (12 µg/mL) Resistant (≥ 8 µg/mL) Resistant (> 4 µg/mL) Resistant (32 µg/mL) Intermediate (6 to 8 µg/mL) <sup>4</sup>
<b>Genotypic Analysis</b> Sequencing of 16S ribosomal RNA gene (~ 1480 base pairs)	≥ 99% sequence identity to <i>A. baumannii</i> , strain MRSN 959 (GenBank: VHDS01000075.1)	100% sequence identity to <i>A. baumannii</i> , strain MRSN 959 (GenBank: VHDS01000075.1)



TEST	SPECIFICATIONS	RESULTS
<b>Purity</b> 8 days at 37°C in an aerobic atmosphere with and without 5% CO <sub>2</sub> on Tryptic Soy agar	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology
<b>Viability</b>	Growth	Growth

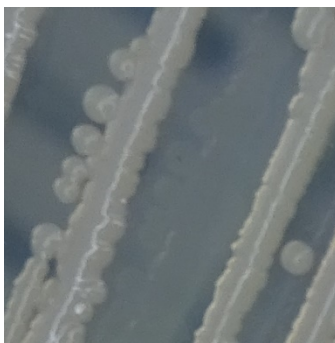
<sup>1</sup>Growth at 44°C differentiates *A. baumannii* from *A. calcoaceticus* and *A. pittii*, which do not grow at 44°C.

<sup>2</sup>Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S28 (2018)

<sup>3</sup>Antibiotic susceptibility was tested using a combination of VITEK® 2 GN82, Sensititre™ GNX2F AST and E-test strips.

<sup>4</sup>Susceptibility results for this antibiotic are within one doubling dilution of specification, which is considered an equivalent result.

Figure 1: Colony Morphology



/Heather Couch/  
Heather Couch

28 MAY 2021

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***Acinetobacter baumannii*, Strain MRSN 960**

**Catalog No. NR-52152**

This reagent is the tangible property of the U.S. Government.

**Product Description:**

*Acinetobacter baumannii* (*A. baumannii*), strain MRSN 960 was isolated in 2008 from a human wound sample in the USA as part of a global surveillance program. *A. baumannii*, strain MRSN 960 was deposited as sensitive to colistin and tobramycin and resistant to amikacin, ampicillin/sulbactam, cefepime, ceftazidime, ceftriaxone, ciprofloxacin, gentamicin, imipenem, levofloxacin, meropenem, tetracycline and trimethoprim/sulfamethoxazole. NR-52152 lot 70038528 was produced by inoculation of the deposited material into Tryptic Soy broth and grown for 1 day at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar kolles, which were grown for 1 day at 37°C in an aerobic atmosphere to produce this lot. Quality control testing was completed under propagation conditions unless otherwise noted.

**Lot: 70038528**

**Manufacturing Date: 26AUG2020**

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TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis</b> Cellular morphology Colony morphology  Growth at 44°C ± 2°C <sup>1</sup> 1 day in an aerobic atmosphere on Tryptic Soy agar Motility Remel™ Motility Test Medium w/TTC Indicator for 1 day at 37°C in an aerobic atmosphere VITEK® MS (MALDI-TOF)	Gram-negative rods Report results  Growth  Report results  <i>A. baumannii</i>	Gram-negative rods Circular, convex, entire, smooth and cream (Figure 1) Growth  Non-motile  <i>A. baumannii</i> (99.9%)
<b>Antibiotic Susceptibility Profile<sup>2,3</sup></b> Amikacin Ampicillin/sulbactam Cefepime Ceftriaxone Ceftazidime Ciprofloxacin Colistin Gentamicin Imipenem Levofloxacin Meropenem Trimethoprim/sulfamethoxazole Tobramycin Tetracycline	Resistant Resistant Resistant Resistant Resistant Resistant Sensitive Resistant Resistant Resistant Resistant Resistant Resistant Resistant Sensitive Resistant	Intermediate (24 µg/mL) <sup>4</sup> Resistant (32 µg/mL) Resistant (32 to 48 µg/mL) Resistant (> 32 µg/mL) Resistant (≥ 64 µg/mL) Resistant (≥ 4 µg/mL) Sensitive (≤ 0.25 µg/mL) Resistant (≥ 16 µg/mL) Resistant (≥ 8 µg/mL) Resistant (8 µg/mL) Resistant (> 8 µg/mL) Resistant (> 4 µg/mL) Sensitive (≤ 1 µg/mL) Resistant (128 µg/mL)
<b>Genotypic Analysis</b> Sequencing of 16S ribosomal RNA gene (~ 1490 base pairs)	≥ 99% sequence identity to <i>A. baumannii</i> , strain MRSN 960 (GenBank: VHDR01000076.1)	99.9% sequence identity to <i>A. baumannii</i> , strain MRSN 960 (GenBank: VHDR01000076.1)
<b>Purity</b> 7 days at 37°C in an aerobic atmosphere with and without 5% CO <sub>2</sub> on Tryptic Soy agar	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology

TEST	SPECIFICATIONS	RESULTS
Viability	Growth	Growth

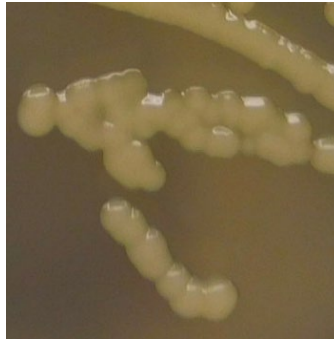
<sup>1</sup>Growth at 44°C differentiates *A. baumannii* from *A. calcoaceticus* and *A. pittii*, which do not grow at 44°C.

<sup>2</sup>Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S28 (2018)

<sup>3</sup>Antibiotic susceptibility was tested using a combination of VITEK<sup>®</sup> 2 GN82, Sensititre GNX2F AST and E-test strips.

<sup>4</sup>The susceptibility result for this antibiotic is within one doubling dilution of specification, which is considered an equivalent result.

Figure 1: Colony Morphology



/Heather Couch/  
Heather Couch

17 NOV 2021

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**Acinetobacter baumannii, Strain MRSN 1171**

**Catalog No. NR-52153**

This reagent is the tangible property of the U.S. Government.

**Product Description:**

*Acinetobacter baumannii* (*A. baumannii*), strain MRSN 1171 was isolated in 2006 from a human respiratory sample in the United States as part of a global surveillance program. *A. baumannii*, strain MRSN 1171 was deposited as sensitive to amikacin, colistin, imipenem and meropenem, intermediately resistant to tobramycin and resistant to ampicillin/sulbactam, cefepime, ceftazidime, ceftriaxone, ciprofloxacin, gentamicin, levofloxacin, tetracycline and trimethoprim/sulfamethoxazole. NR-52153 lot 70038529 was produced by inoculation of the deposited material into Tryptic Soy broth and grown for 1 day at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar kolles, which were grown for 1 day at 37°C in an aerobic atmosphere to produce this lot. Quality control testing was completed under propagation conditions unless otherwise noted.

**Lot: 70038529**

**Manufacturing Date: 26AUG2020**

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TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis</b> Cellular morphology Colony morphology  Growth at 44°C ± 2°C <sup>1</sup> 1 day in an aerobic atmosphere on Tryptic Soy agar Motility Remel™ Motility Test Medium w/TTC Indicator for 1 day at 37°C in an aerobic atmosphere VITEK® GN card VITEK® MS (MALDI-TOF)	Gram-negative rods Report results  Growth  Report results  <i>A. baumannii</i> (≥ 89%) <i>A. baumannii</i>	Gram-negative rods Circular, low convex, entire, smooth and cream (Figure 1) Growth  Non-motile  <i>A. baumannii</i> (99%) <i>A. baumannii</i> (99.9%)
<b>Antibiotic Susceptibility Profile<sup>2,3</sup></b> Amikacin Ampicillin/sulbactam Cefepime Ceftriaxone Ceftazidime Ciprofloxacin Colistin Gentamicin Imipenem Levofloxacin Meropenem Trimethoprim/sulfamethoxazole Tobramycin Tetracycline	Sensitive Resistant Resistant Resistant Resistant Resistant Sensitive Resistant Sensitive Resistant Sensitive Resistant Sensitive Resistant Intermediate Resistant	Sensitive (≤ 16 µg/mL) Resistant (96 µg/mL) Resistant (48 µg/mL) Resistant (≥ 64 µg/mL) Resistant (≥ 64 µg/mL) Resistant (≥ 4 µg/mL) Sensitive (≤ 0.25 µg/mL) Resistant (≥ 16 µg/mL) Sensitive (≤ 1 µg/mL) Resistant (> 32 µg/mL) Sensitive (≤ 1 µg/mL) Resistant (≥ 4 µg/mL) Intermediate (6 µg/mL) Resistant (> 256 µg/mL)
<b>Genotypic Analysis</b> Sequencing of 16S ribosomal RNA gene (1480 base pairs)	≥ 99% sequence identity to <i>A. baumannii</i> , strain MRSN 1171 (GenBank: VHHG01000066.1)	99.9% sequence identity to <i>A. baumannii</i> , strain MRSN 1171 (GenBank: VHHG01000066.1)

TEST	SPECIFICATIONS	RESULTS
<b>Purity</b> 7 days at 37°C in an aerobic atmosphere with and without 5% CO <sub>2</sub> on Tryptic Soy agar	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology
<b>Viability</b>	Growth	Growth

<sup>1</sup>Growth at 44°C differentiates *A. baumannii* from *A. calcoaceticus* and *A. pittii*, which do not grow at 44°C.

<sup>2</sup>Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S28 (2018)

<sup>3</sup>Antibiotic susceptibility was tested using a combination of VITEK<sup>®</sup> 2 GN82, Sensititre™ GNX2F AST and E-test strips.

**Figure 1: Colony Morphology**



/Heather Couch/  
Heather Couch

06 APR 2021

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**Acinetobacter baumannii, Strain MRSN 1174**

**Catalog No. NR-52154**

This reagent is the tangible property of the U.S. Government.

**Product Description:**

*Acinetobacter baumannii* (*A. baumannii*), strain MRSN 1174 was isolated in 2006 from a human blood sample in the USA as part of a global surveillance program. *A. baumannii*, strain MRSN 1174 was deposited as multi-locus sequence type (MLST) ST 2, sensitive to colistin and ampicillin/sulbactam, intermediately resistant to tetracycline and resistant to amikacin, cefepime, ceftazidime, ceftriaxone, ciprofloxacin, gentamicin, imipenem, levofloxacin, meropenem, tobramycin and trimethoprim/sulfamethoxazole. NR-52154 was produced by inoculation of the deposited material into Tryptic Soy broth and grown for 1 day at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar kolles, which were grown for 1 day at 37°C in an aerobic atmosphere to produce this lot. Quality control testing was completed under propagation conditions unless otherwise noted.

**Lot: 70038530**

**Manufacturing Date: 26AUG2020**

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TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis</b> Cellular morphology Colony morphology  Growth at 44°C ± 2°C <sup>1</sup> 1 day in an aerobic atmosphere on Tryptic Soy agar Motility Remel™ Motility Test Medium w/TTC Indicator for 1 day at 37°C in an aerobic atmosphere VITEK® MS (MALDI-TOF)	Gram-negative rods Report results  Growth  Report results  <i>A. baumannii</i>	Gram-negative rods Circular, convex, entire, smooth and cream (Figure 1) Growth  Non-motile  <i>A. baumannii</i> (99.9%)
<b>Antibiotic Susceptibility Profile<sup>2,3</sup></b> Amikacin Ampicillin/sulbactam Cefepime Ceftriaxone Ceftazidime Ciprofloxacin Colistin Gentamicin Imipenem Levofloxacin Meropenem Trimethoprim/sulfamethoxazole Tobramycin Tetracycline	Resistant Sensitive Resistant Resistant Resistant Resistant Sensitive Resistant Resistant Resistant Resistant Resistant Resistant Resistant Resistant Resistant Resistant Intermediate	Intermediate (24 µg/mL) <sup>4</sup> Resistant (96 µg/mL) <sup>5</sup> Resistant (32 µg/mL) Resistant (≥ 64 µg/mL) Resistant (≥ 64 µg/mL) Resistant (≥ 4 µg/mL) Sensitive (≤ 0.25 µg/mL) Resistant (≥ 16 µg/mL) Resistant (12 to 16 µg/mL) Resistant (4 to 8 µg/mL) Resistant (> 32 µg/mL) Resistant (> 4 µg/mL) Sensitive (4 µg/mL) <sup>6</sup> Resistant (≥ 256 µg/mL) <sup>7</sup>
<b>Genotypic Analysis</b> Sequencing of 16S ribosomal RNA gene (1480 base pairs)	≥ 99% sequence identity to <i>A. baumannii</i> , strain MRSN 1174 (GenBank: VHHF01000099.1)	99.9% sequence identity to <i>A. baumannii</i> , strain MRSN 1174 (GenBank: VHHF01000099.1)

TEST	SPECIFICATIONS	RESULTS
<b>Purity</b> 8 days at 37°C in an aerobic atmosphere with and without 5% CO <sub>2</sub> on Tryptic Soy agar	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology
<b>Viability</b>	Growth	Growth

<sup>1</sup>Growth at 44°C differentiates *A. baumannii* from *A. calcoaceticus* and *A. pittii*, which do not grow at 44°C.

<sup>2</sup>Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S28 (2018)

<sup>3</sup>Antibiotic susceptibility was tested using a combination of VITEK<sup>®</sup>2 GN82, Sensititre GNX2F AST and E-test strips.

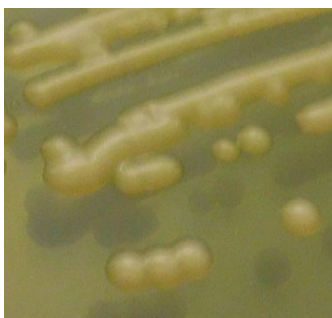
<sup>4</sup>*A. baumannii*, strain MRSN 1174 was deposited as being resistant to amikacin. Repeated antibiotic susceptibility testing determined that for strain MRSN 1174, the amikacin MIC is 24 µg per mL, which is interpreted as intermediately resistant. Testing was performed in duplicate.

<sup>5</sup>*A. baumannii* strain MRSN 1174 was deposited as being sensitive to ampicillin/sulbactam. Repeated antibiotic susceptibility testing determined that for strain MRSN 1174, the ampicillin/sulbactam MIC is 96 µg per mL, which is interpreted as resistant. Testing was performed in duplicate.

<sup>6</sup>*A. baumannii*, strain MRSN 1174 was deposited as being resistant to tobramycin. Repeated antibiotic susceptibility testing determined that for strain MRSN 1174, the tobramycin MIC is 4 µg per mL, which is interpreted as sensitive. Testing was performed in duplicate.

<sup>7</sup>*A. baumannii*, strain MRSN 1174 was deposited as being intermediately resistant to tetracycline. Repeated antibiotic susceptibility testing determined that for strain MRSN 1174, the tetracycline MIC is ≥ 256 µg per mL, which is interpreted as resistant. Testing was performed in duplicate.

Figure 1: Colony Morphology



/Heather Couch/  
Heather Couch

Program Manager or designee, ATCC Federal Solutions

21 JAN 2022

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**Acinetobacter baumannii, Strain MRSN 1183**

**Catalog No. NR-52155**

This reagent is the tangible property of the U.S. Government.

**Product Description:**

*Acinetobacter baumannii* (*A. baumannii*), strain MRSN 1183 was isolated in 2010 from a human wound sample in the USA as part of a global surveillance program. *A. baumannii*, strain MRSN 1183 was deposited as sensitive to ampicillin/sulbactam, ceftazidime, cefepime, colistin, imipenem and meropenem, intermediately resistant to ceftriaxone, and resistant to amikacin, ciprofloxacin, gentamicin, levofloxacin, tetracycline, trimethoprim/sulfamethoxazole and tobramycin. NR-52155 was produced by inoculation of the deposited material into Tryptic Soy broth and grown for 1 day at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar kolles, which were grown for 1 day at 37°C in an aerobic atmosphere to produce this lot. Quality control testing was completed under propagation conditions unless otherwise noted.

**Lot: 70039384**

**Manufacturing Date: 15OCT2020**

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TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis</b> Cellular morphology Colony morphology  Growth at 44°C ± 2°C <sup>1</sup> 1 day in an aerobic atmosphere on Tryptic Soy agar Motility Remel™ Motility Test Medium w/TTC Indicator for 1 day at 37°C in an aerobic atmosphere VITEK® MS (MALDI-TOF)	Gram-negative rods Report results  Growth  Report results  <i>A. baumannii</i>	Gram-negative rods Circular, convex, entire, smooth and cream (Figure 1) Growth  Non-motile  <i>A. baumannii</i> (99.9%)
<b>Antibiotic Susceptibility Profile<sup>2,3</sup></b> Amikacin Ampicillin/sulbactam Cefepime Ceftriaxone Ceftazidime Ciprofloxacin Colistin Gentamicin Imipenem Levofloxacin Meropenem Trimethoprim/sulfamethoxazole Tobramycin Tetracycline	Resistant Sensitive Sensitive Intermediate Sensitive Resistant Sensitive Resistant Sensitive Resistant Sensitive Resistant Sensitive Resistant Resistant Resistant	Resistant (192 µg/mL) Resistant (12 to 24 µg/mL) <sup>4</sup> Sensitive (4 µg/mL) Resistant (> 32 µg/mL) <sup>5</sup> Inconclusive <sup>6</sup> Resistant (≥ 4 µg/mL) Sensitive (≤ 0.25 µg/mL) Resistant (≥ 16 µg/mL) Sensitive (≤ 1 µg/mL) Resistant (8 µg/mL) Sensitive (≤ 1 µg/mL) Resistant (> 4 µg/mL) Resistant (≥ 16 µg/mL) Resistant (> 256 µg/mL)
<b>Genotypic Analysis</b> Sequencing of 16S ribosomal RNA gene (~ 1470 base pairs)	≥ 99% sequence identity to <i>A. baumannii</i> , strain MRSN 1183 (GenBank: VHH01000091.1)	100% sequence identity to <i>A. baumannii</i> , strain MRSN 1183 (GenBank: VHH01000091.1)



TEST	SPECIFICATIONS	RESULTS
<b>Purity</b> 9 days at 37°C in an aerobic atmosphere with and without 5% CO <sub>2</sub> on Tryptic Soy agar	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology
<b>Viability</b>	Growth	Growth

<sup>1</sup>Growth at 44°C differentiates *A. baumannii* from *A. calcoaceticus* and *A. pittii*, which do not grow at 44°C.

<sup>2</sup>Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S28 (2018)

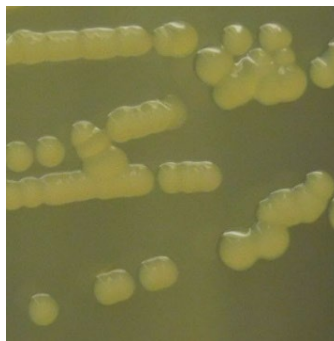
<sup>3</sup>Antibiotic susceptibility was tested using a combination of VITEK2 GN82, Sensititre GNX2F AST and E-test strips.

<sup>4</sup>*A. baumannii* strain MRSN 1183 was deposited as being sensitive to ampicillin-sulbactam. Repeated antibiotic susceptibility testing determined that for strain MRSN 1183, the ampicillin/sulbactam MIC is 12 to 24 µg per mL, which is interpreted as resistant. Testing was performed in duplicate.

<sup>5</sup>*A. baumannii* strain MRSN 1183 was deposited as being intermediately resistant to ceftriaxone. Repeated antibiotic susceptibility testing determined that for strain MRSN 1183, the ceftriaxone MIC is > 32 µg per mL, which is interpreted as resistant. Testing was performed in duplicate.

<sup>6</sup>*A. baumannii* strain MRSN 1183 was deposited as being sensitive to ceftazidime. Repeated antibiotic susceptibility testing determined that for strain MRSN 1183, the ceftazidime MICs are 1.5 µg per mL and 32 µg per mL, which are interpreted as sensitive and resistant, respectively.

Figure 1: Colony Morphology



/Heather Couch/

Heather Couch

Program Manager or designee, ATCC Federal Solutions

19 NOV 2021

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**Acinetobacter baumannii, Strain MRSN 1187**

**Catalog No. NR-52156**

This reagent is the tangible property of the U.S. Government.

**Product Description:**

*Acinetobacter baumannii* (*A. baumannii*), strain MRSN 1187 was isolated in 2010 from a human wound in the United States as part of a global surveillance program. *A. baumannii*, strain MRSN 1187 was deposited as sensitive to colistin, imipenem, meropenem and tetracycline and resistant to amikacin, ceftazidime, ciprofloxacin, ceftriaxone, gentamicin, trimethoprim/sulfamethoxazole, levofloxacin, tobramycin and ampicillin/sulbactam, with intermediate resistance to cefepime. NR-52156 lot 70039386 was produced by inoculation of the deposited material into Tryptic Soy broth and grown for 1 day at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar kolles, which were grown for 1 day at 37°C in an aerobic atmosphere to produce this lot. Quality control testing was completed under propagation conditions unless otherwise noted.

**Lot: 70039386**

**Manufacturing Date: 24SEP2020**

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TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis</b> Cellular morphology Colony morphology  Growth at 44°C ± 2°C <sup>1</sup> 1 day in an aerobic atmosphere on Tryptic Soy agar Motility Remel™ Motility Test Medium w/TTC Indicator for 1 day at 37°C in an aerobic atmosphere VITEK® MS (MALDI-TOF)	Gram-negative rods Report results  Growth  Report results  <i>A. baumannii</i>	Gram-negative rods Circular, convex, entire, smooth and cream (Figure 1) Growth  Non-motile  <i>A. baumannii</i> (99.9%)
<b>Antibiotic Susceptibility Profile<sup>2,3</sup></b> Amikacin Ampicillin/sulbactam Cefepime Ceftriaxone Ceftazidime Ciprofloxacin Colistin Gentamicin Imipenem Levofloxacin Meropenem Trimethoprim/sulfamethoxazole Tobramycin Tetracycline	Resistant Resistant Intermediate Resistant Resistant Resistant Resistant Sensitive Resistant Sensitive Resistant Sensitive Resistant Sensitive Resistant Resistant Sensitive	Resistant (128 µg/mL) Sensitive (8 µg/mL) <sup>4</sup> Intermediate (12 to 16 µg/mL) Resistant (≥ 64 µg/mL) Resistant (≥ 64 µg/mL) Resistant (≥ 4 µg/mL) Sensitive (≤ 0.25 µg/mL) Resistant (≥ 16 µg/mL) Sensitive (≤ 1 µg/mL) Resistant (> 4 µg/mL) Sensitive to Intermediate (2 to 3 µg/mL) Resistant (> 4 µg/mL) Resistant (64 µg/mL) Resistant (> 256 µg/mL) <sup>5</sup>
<b>Genotypic Analysis</b> Sequencing of 16S ribosomal RNA gene (1480 base pairs)	≥ 99% sequence identity to <i>A. baumannii</i> , strain MRSN 1187 (GenBank: VHHC01000094.1)	99.9% sequence identity to <i>A. baumannii</i> , strain MRSN 1187 (GenBank: VHHC01000094.1)
<b>Purity</b> 12 days at 37°C in an aerobic atmosphere with and without 5% CO <sub>2</sub> on Tryptic Soy agar	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology

TEST	SPECIFICATIONS	RESULTS
Viability	Growth	Growth

<sup>1</sup>Growth at 44°C differentiates *A. baumannii* from *A. calcoaceticus* and *A. pittii*, which do not grow at 44°C.

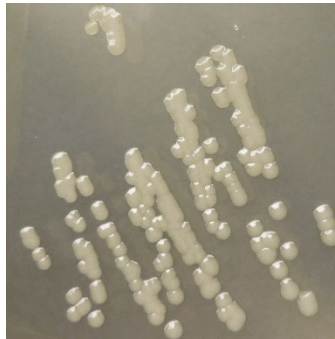
<sup>2</sup>Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S28 (2018)

<sup>3</sup>Antibiotic susceptibility was tested using a combination of VITEK<sup>®</sup>2 GN82, Sensititre™ GNX2F AST and E-test strips.

<sup>4</sup>*A. baumannii*, strain MRSN 1187 was deposited as resistant to ampicillin/sulbactam but showed a MIC of 8 µg/mL (interpreted as sensitive) for ampicillin/sulbactam during QC testing. Testing was performed in duplicate.

<sup>5</sup>*A. baumannii*, strain MRSN 1187 was deposited as sensitive to tetracycline but showed a MIC of > 256 µg/mL (interpreted as resistant) for tetracycline during QC testing. Testing was performed in quadruplicate.

Figure 1: Colony Morphology



/Heather Couch/  
Heather Couch

Program Manager or designee, ATCC Federal Solutions

23 JUN 2021

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**Acinetobacter baumannii, Strain MRSN 1196**

**Catalog No. NR-52157**

This reagent is the tangible property of the U.S. Government.

**Product Description:**

*Acinetobacter baumannii* (*A. baumannii*), strain MRSN 1196 was isolated in 2010 from a human wound sample in the United States as part of a global surveillance program. NR-52157 was deposited as multi-locus sequence type (MLST) ST 108, resistant to cefepime, ceftazidime, ceftriaxone, ciprofloxacin, gentamicin, levofloxacin and trimethoprim/sulfamethoxazole, sensitive to ampicillin/sulbactam, colistin, imipenem, meropenem and tetracycline and intermediately resistant to amikacin and tobramycin. NR-52157 was produced by inoculation of the deposited material into Tryptic Soy broth and grown for 1 day at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar kolles, which were grown for 1 day at 37°C in an aerobic atmosphere to produce this lot. Quality control testing was completed under propagation conditions unless otherwise noted.

**Lot: 70039388**

**Manufacturing Date: 15OCT2020**

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TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis</b> Cellular morphology Colony morphology  Growth at 44°C ± 2°C <sup>1</sup> 1 day in an aerobic atmosphere on Tryptic Soy agar  Motility BBL™ Motility Test Medium w/TTC Indicator for 1 day at 35°C in an aerobic atmosphere  VITEK® MS (MALDI-TOF)	Gram-negative rods Report results  Growth  Report results  <i>A. baumannii</i>	Gram-negative rods Circular, convex, entire, smooth and cream (Figure 1) Growth  Motile  <i>A. baumannii</i> (99.9%)
<b>Antibiotic Susceptibility Profile<sup>2,3</sup></b> Amikacin Ampicillin/sulbactam Cefepime Ceftriaxone Ceftazidime Ciprofloxacin Colistin Gentamicin Imipenem Levofloxacin Meropenem Trimethoprim/sulfamethoxazole Tobramycin Tetracycline	Intermediate Sensitive Resistant Resistant Resistant Resistant Resistant Sensitive Sensitive Resistant Sensitive Resistant Intermediate Sensitive	Intermediate (32 µg/mL) Sensitive (4 µg/mL) Resistant (48 µg/mL) Resistant (≥ 64 µg/mL) Resistant (≥ 64 µg/mL) Resistant (≥ 4 µg/mL) Sensitive (≤ 0.25 µg/mL) Resistant (32 µg/mL) Sensitive (≤ 1 µg/mL) Resistant (≥ 32 µg/mL) Sensitive (≤ 1 µg/mL) Resistant (> 4 µg/mL) Sensitive (4 µg/mL) <sup>4</sup> Resistant (16 µg/mL) <sup>5</sup>
<b>Genotypic Analysis</b> Sequencing of 16S ribosomal RNA gene (~ 1470 base pairs)	≥ 99% sequence identity to <i>A. baumannii</i> , strain MRSN 1196 (GenBank: VHHB01000067.1)	100% sequence identity to <i>A. baumannii</i> , strain MRSN 1196 (GenBank: VHHB01000067.1)
<b>Purity</b> 7 days at 37°C in an aerobic atmosphere with and without 5% CO <sub>2</sub> on Tryptic Soy agar	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology

TEST	SPECIFICATIONS	RESULTS
Viability	Growth	Growth

<sup>1</sup>Growth at 44°C differentiates *A. baumannii* from *A. calcoaceticus* and *A. pittii*, which do not grow at 44°C.

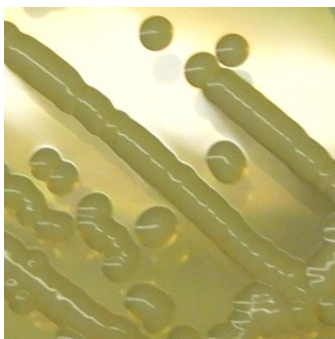
<sup>2</sup>Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S28 (2018)

<sup>3</sup>Antibiotic susceptibility was tested using a combination of VITEK<sup>®</sup>2 GN82, Sensititre GNX2F AST and E-test strips.

<sup>4</sup>The susceptibility result for this antibiotic is within one doubling dilution of specification, which is considered an equivalent result.

<sup>5</sup>*A. baumannii*, strain MRSN 1196 was deposited as sensitive to tetracycline but showed a MIC of 16 µg per mL (interpreted as resistant) for tetracycline during QC testing. Testing was performed in duplicate.

Figure 1: Colony Morphology



/Heather Couch/  
Heather Couch

31 AUG 2021

Program Manager or designee, ATCC Federal Solutions

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**Acinetobacter baumannii, Strain MRSN 1311**

**Catalog No. NR-52158**

This reagent is the tangible property of the U.S. Government.

**Product Description:**

*Acinetobacter baumannii* (*A. baumannii*), strain MRSN 1311 was isolated in 2007 from a human blood sample in the United States as part of a global surveillance program. *A. baumannii*, strain MRSN 1311 was deposited as sensitive to amikacin, colistin and tobramycin, and resistant to trimethoprim/sulfamethoxazole, ceftazidime, levofloxacin, ciprofloxacin, gentamicin, ceftriaxone, cefepime, imipenem, meropenem, tetracycline and ampicillin/sulbactam. NR-52158 lot 70038531 was produced by inoculation of the deposited material into Tryptic Soy broth and grown for 1 day at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar kolles, which were grown for 1 day at 37°C in an aerobic atmosphere to produce this lot. Quality control testing was completed under propagation conditions unless otherwise noted.

**Lot: 70038531**

**Manufacturing Date: 26AUG2020**

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TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis</b> Cellular morphology Colony morphology  Growth at 44°C ± 2°C <sup>1</sup> 1 day in an aerobic atmosphere on Tryptic Soy agar  Motility Remel™ Motility Test Medium w/TTC Indicator for 1 day at 37°C in an aerobic atmosphere  VITEK® MS (MALDI-TOF)	Gram-negative rods Report results  Growth  Report results  <i>A. baumannii</i>	Gram-negative rods Circular, convex, entire, smooth and cream (Figure 1) Growth  Motile  <i>A. baumannii</i> (99.9%)
<b>Antibiotic Susceptibility Profile<sup>2,3</sup></b> Amikacin Ampicillin/sulbactam Cefepime Ceftriaxone Ceftazidime Ciprofloxacin Colistin Gentamicin Imipenem Levofloxacin Meropenem Trimethoprim/sulfamethoxazole Tobramycin Tetracycline	Sensitive Resistant Resistant Resistant Resistant Resistant Sensitive Resistant Resistant Resistant Resistant Resistant Resistant Resistant Sensitive Resistant	Sensitive (≤ 4 µg/mL) Resistant (32 µg/mL) Resistant (> 256 µg/mL) Resistant (≥ 64 µg/mL) Resistant (≥ 64 µg/mL) Resistant (≥ 4 µg/mL) Sensitive (≤ 0.25 µg/mL) Resistant (≥ 16 µg/mL) Resistant (> 8 µg/mL) Resistant (> 32 µg/mL) Resistant (> 8 µg/mL) Resistant (> 4 µg/mL) Sensitive (≤ 1 µg/mL) Resistant (256 µg/mL)
<b>Genotypic Analysis</b> Sequencing of 16S ribosomal RNA gene (~ 1480 base pairs)	≥ 99% sequence identity to <i>A. baumannii</i> , strain MRSN 1311 (GenBank: VHHAA01000072.1)	100% sequence identity to <i>A. baumannii</i> , strain MRSN 1311 (GenBank: VHHAA01000072.1)

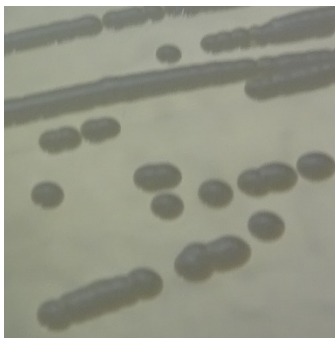
TEST	SPECIFICATIONS	RESULTS
<b>Purity</b> 7 days at 37°C in an aerobic atmosphere with and without 5% CO <sub>2</sub> on Tryptic Soy agar	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology
<b>Viability</b>	Growth	Growth

<sup>1</sup>Growth at 44°C differentiates *A. baumannii* from *A. calcoaceticus* and *A. pittii*, which do not grow at 44°C.

<sup>2</sup>Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S28 (2018)

<sup>3</sup>Antibiotic susceptibility was tested using a combination of VITEK<sup>®</sup>2 GN82, Sensititre™ GNX2F AST and E-test strips.

Figure 1: Colony Morphology



/Heather Couch/

Heather Couch

20 APR 2021

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**Acinetobacter baumannii, Strain MRSN 1551**

**Catalog No. NR-52159**

This reagent is the tangible property of the U.S. Government.

**Product Description:**

*Acinetobacter baumannii* (*A. baumannii*), strain MRSN 1551 was isolated in 2010 from a human specimen in the USA as part of a global surveillance program. *A. baumannii*, strain MRSN 1551 was deposited as multi-locus sequence type (MLST) ST 10, sensitive to amikacin, ceftazidime, colistin, cefepime, imipenem, levofloxacin, meropenem, ampicillin/sulbactam and tobramycin, resistant to ciprofloxacin, trimethoprim/sulfamethoxazole and tetracycline and intermediately resistant to ceftriaxone and gentamicin. NR-52159 was produced by inoculation of the deposited material into Tryptic Soy broth and grown for 1 day at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar kolles, which were grown for 1 day at 37°C in an aerobic atmosphere to produce this lot. Quality control testing was completed under propagation conditions unless otherwise noted.

**Lot: 70040776**

**Manufacturing Date: 09DEC2020**

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TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis</b> Cellular morphology Colony morphology  Growth at 44°C ± 2°C <sup>1</sup> 1 day in an aerobic atmosphere on Tryptic Soy agar Motility Remel™ Motility Test Medium w/TTC Indicator for 1 day at 37°C in an aerobic atmosphere VITEK® MS (MALDI-TOF)	Gram-negative rods Report results  Growth  Report results  <i>A. baumannii</i>	Gram-negative rods Circular, convex, entire, smooth and cream (Figure 1) Growth  Motile  <i>A. baumannii</i> (99.9%)
<b>Antibiotic Susceptibility Profile<sup>2,3</sup></b> Amikacin Ampicillin/sulbactam Cefepime Ceftriaxone Ceftazidime Ciprofloxacin Colistin Gentamicin Imipenem Levofloxacin Meropenem Trimethoprim/sulfamethoxazole Tobramycin Tetracycline	Sensitive Sensitive Sensitive Intermediate Sensitive Resistant Sensitive Intermediate Sensitive Sensitive Sensitive Sensitive Resistant Sensitive Resistant	Sensitive (≤ 4 µg/mL) Sensitive (2 µg/mL) Sensitive (≤ 2 µg/mL) Intermediate (≥ 32 µg/mL) Sensitive (8 µg/mL) Intermediate (2 µg/mL) <sup>4</sup> Sensitive (≤ 0.25 µg/mL) Sensitive (3 µg/mL) <sup>5</sup> Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Resistant (≥ 4 µg/mL) Sensitive (≤ 1 µg/mL) Resistant (≥ 256 µg/mL)
<b>Genotypic Analysis</b> Sequencing of 16S ribosomal RNA gene (~ 1470 base pairs)	≥ 99% sequence identity to <i>A. baumannii</i> , strain MRSN 1551 (GenBank: VHGQ01000056.1)	100% sequence identity to <i>A. baumannii</i> , strain MRSN 1551 (GenBank: VHGQ01000056.1)
<b>Purity</b> 7 days at 37°C in an aerobic atmosphere with and without 5% CO <sub>2</sub> on Tryptic Soy agar	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology



TEST	SPECIFICATIONS	RESULTS
Viability	Growth	Growth

<sup>1</sup>Growth at 44°C differentiates *A. baumannii* from *A. calcoaceticus* and *A. pittii*, which do not grow at 44°C.

<sup>2</sup>Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S28 (2018)

<sup>3</sup>Antibiotic susceptibility was tested using a combination of VITEK<sup>®</sup>2 GN82, Sensititre GNX2F AST and E-test strips.

<sup>4</sup>The susceptibility result for this antibiotic is within one doubling dilution of specification, which is considered an equivalent result.

<sup>5</sup>*A. baumannii*, strain MRSN 1551 was deposited as being intermediately resistant to gentamicin. Antibiotic susceptibility testing determined that for strain MRSN 1551, the gentamicin MIC is 3 µg per mL, which is interpreted as sensitive. Testing was performed in duplicate.

Figure 1: Colony Morphology



/Heather Couch/  
Heather Couch

31 AUG 2021

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**Acinetobacter baumannii, Strain MRSN 2821**

**Catalog No. NR-52160**

This reagent is the tangible property of the U.S. Government.

**Product Description:**

*Acinetobacter baumannii* (*A. baumannii*), strain MRSN 2821 was isolated in 2009 from a human wound sample in the United States as part of a global surveillance program. *A. baumannii*, strain MRSN 2821 was deposited as sensitive to amikacin, ampicillin/sulbactam, cefepime, ceftazidime, ciprofloxacin, colistin, gentamicin, imipenem, levofloxacin, meropenem, tobramycin and trimethoprim/sulfamethoxazole and intermediately resistant to ceftriaxone and tetracycline. NR-52160 lot 70041720 was produced by inoculation of the deposited material into Tryptic Soy broth and grown for 1 day at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar kolles, which were grown for 1 day at 37°C in an aerobic atmosphere to produce this lot. Quality control testing was completed under propagation conditions unless otherwise noted.

**Lot: 70041720**

**Manufacturing Date: 05FEB2021**

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TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis</b> Cellular morphology Colony morphology  Growth at 44°C ± 2°C <sup>1</sup> 1 day in an aerobic atmosphere on Tryptic Soy agar Motility Remel™ Motility Test Medium w/TTC Indicator for 1 day at 37°C in an aerobic atmosphere VITEK® MS (MALDI-TOF)	Gram-negative rods Report results  Growth  Report results  <i>A. baumannii</i>	Gram-negative rods Circular, convex, entire, smooth and cream (Figure 1) Growth  Motile  <i>A. baumannii</i> (99.9%)
<b>Antibiotic Susceptibility Profile<sup>2,3</sup></b> Amikacin Ampicillin/sulbactam Cefepime Ceftriaxone Ceftazidime Ciprofloxacin Colistin Gentamicin Imipenem Levofloxacin Meropenem Trimethoprim/sulfamethoxazole Tobramycin Tetracycline	Sensitive Sensitive Sensitive Intermediate Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Intermediate	Sensitive (4 to 6 µg/mL) Sensitive (1 µg/mL) Sensitive (1.5 to 2 µg/mL) Intermediate (16 µg/mL) Sensitive (8 µg/mL) Sensitive (≤ 0.25 µg/mL) Sensitive (≤ 0.25 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 0.5 µg/mL) Sensitive (≤ 1 µg/mL) Intermediate (8 to 12 µg/mL)
<b>Genotypic Analysis</b> Sequencing of 16S ribosomal RNA gene (~ 820 base pairs)	≥ 99% sequence identity to <i>A. baumannii</i> , strain MRSN 2821 (GenBank: VHGE01000050.1)	100% sequence identity to <i>A. baumannii</i> , strain MRSN 2821 (GenBank: VHGE01000050.1)
<b>Purity</b> 7 days at 37°C in an aerobic atmosphere with and without 5% CO <sub>2</sub> on Tryptic Soy agar	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology

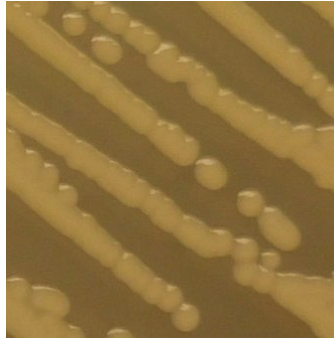
TEST	SPECIFICATIONS	RESULTS
Viability	Growth	Growth

<sup>1</sup>Growth at 44°C differentiates *A. baumannii* from *A. calcoaceticus* and *A. pittii*, which do not grow at 44°C.

<sup>2</sup>Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S28 (2018)

<sup>3</sup>Antibiotic susceptibility was tested using a combination of VITEK<sup>®</sup>2 GN82, Sensititre GNX2F AST and E-test strips.

Figure 1: Colony Morphology



/Heather Couch/  
Heather Couch

04 FEB 2022

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**Acinetobacter baumannii, Strain MRSN 3360**

**Catalog No. NR-52161**

This reagent is the tangible property of the U.S. Government.

**Product Description:**

*Acinetobacter baumannii* (*A. baumannii*), strain MRSN 3360 was isolated in 2011 from a human blood sample in the United States as part of a global surveillance program. NR-52161 was deposited as multi-locus sequence type (MLST) ST 499, sensitive to amikacin, ceftazidime, colistin and ceftriaxone, intermediately resistant to tobramycin and tetracycline and resistant to ciprofloxacin, cefepime, gentamicin, imipenem, levofloxacin, meropenem, ampicillin/sulbactam and trimethoprim/sulfamethoxazole. NR-52161 was produced by inoculation of the deposited material into Tryptic Soy broth and grown for 1 day at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar kolles, which were grown for 1 day at 37°C in an aerobic atmosphere to produce this lot. Quality control testing was completed under propagation conditions unless otherwise noted.

**Lot: 70038551**

**Manufacturing Date: 26AUG2020**

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TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis</b> Cellular morphology Colony morphology  Growth at 44°C ± 2°C <sup>1</sup> 1 day in an aerobic atmosphere on Tryptic Soy agar  Motility BBL™ Motility Test Medium w/TTC Indicator for 1 day at 35°C in an aerobic atmosphere  VITEK® MS (MALDI-TOF) VITEK® 2 GN card	Gram-negative rods Report results  Growth  Report results  <i>A. baumannii</i> <i>A. baumannii</i> (≥ 89%)	Gram-negative rods Circular, raised, entire, smooth and cream (Figure 1) Growth  Non-motile  <i>A. baumannii</i> (99.9%) <i>A. baumannii</i> (99%)
<b>Antibiotic Susceptibility Profile<sup>2,3</sup></b> Amikacin Ampicillin/sulbactam Cefepime Ceftriaxone Ceftazidime Ciprofloxacin Colistin Gentamicin Imipenem Levofloxacin Meropenem Trimethoprim/sulfamethoxazole Tobramycin Tetracycline	Sensitive Resistant Resistant Sensitive Sensitive Resistant Sensitive Resistant Resistant Resistant Resistant Resistant Resistant Resistant Resistant Intermediate Intermediate	Sensitive (≤ 4 µg/mL) <b>Intermediate (12 µg/mL)<sup>4</sup></b> Resistant (≥ 32 µg/mL) Sensitive (8 µg/mL) Sensitive (4 µg/mL) Resistant (≥ 4 µg/mL) Sensitive (≤ 0.5 µg/mL) Resistant (≥ 16 µg/mL) Resistant (≥ 8 µg/mL) Resistant (> 8 µg/mL) Resistant (> 8 µg/mL) Resistant (> 4 µg/mL) <b>Inconclusive<sup>5</sup></b> <b>Resistant (256 µg/mL)<sup>6</sup></b>
<b>Genotypic Analysis</b> Sequencing of 16S ribosomal RNA gene (~ 1480 base pairs)	≥ 99% sequence identity to <i>A. baumannii</i> , strain MRSN 3360 (GenBank: VHEZ01000039.1)	100% sequence identity to <i>A. baumannii</i> , strain MRSN 3360 (GenBank: VHEZ01000039.1)

TEST	SPECIFICATIONS	RESULTS
<b>Purity</b> 8 days at 37°C in an aerobic atmosphere with and without 5% CO <sub>2</sub> on Tryptic Soy agar	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology
<b>Viability</b>	Growth	Growth

<sup>1</sup>Growth at 44°C differentiates *A. baumannii* from *A. calcoaceticus* and *A. pittii*, which do not grow at 44°C.

<sup>2</sup>Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S28 (2018)

<sup>3</sup>Antibiotic susceptibility was tested using a combination of VITEK<sup>®</sup>2 GN82, Sensititre GNX2F AST and E-test strips.

<sup>4</sup>*A. baumannii*, strain MRSN 3360 was deposited as resistant to ampicillin/sulbactam but showed a MIC of 12 µg per mL (interpreted as intermediately resistant) for ampicillin/sulbactam during QC testing. Testing was performed in quadruplicate.

<sup>5</sup>*A. baumannii*, strain MRSN 3360 was deposited as being intermediate to tobramycin. Antibiotic susceptibility testing performed in quadruplicate determined that for strain MRSN 3360, the tobramycin MICs are 2 µg per mL, 3 µg per mL, 6 µg per mL and 8 µg per mL, which are interpreted as sensitive, sensitive, intermediate and intermediate, respectively.

<sup>6</sup>*A. baumannii*, strain MRSN 3360 was deposited as intermediately resistant to tetracycline but showed a MIC of 256 µg per mL (interpreted as resistant) for tetracycline during QC testing. Testing was performed in quadruplicate.

Figure 1: Colony Morphology



/Heather Couch/

Heather Couch

31 AUG 2021

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**Acinetobacter baumannii, Strain MRSN 3658**

**Catalog No. NR-52162**

This reagent is the tangible property of the U.S. Government.

**Product Description:**

*Acinetobacter baumannii* (*A. baumannii*), strain MRSN 3658 was isolated in 2010 from a human specimen in Europe as part of a global surveillance program. *A. baumannii*, strain MRSN 3658 was deposited as sensitive to amikacin, ampicillin/sulbactam, cefepime, ceftazidime, ceftriaxone, ciprofloxacin, colistin, gentamicin, imipenem, levofloxacin, meropenem, tetracycline, trimethoprim/sulfamethoxazole and tobramycin. NR-52162 lot 70041722 was produced by inoculation of the deposited material into Tryptic Soy broth and grown for 1 day at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar kolles, which were grown for 1 day at 37°C in an aerobic atmosphere to produce this lot. Quality control testing was completed under propagation conditions unless otherwise noted.

**Lot: 70041722**

**Manufacturing Date: 05FEB2021**

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TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis</b> Cellular morphology Colony morphology  Growth at 44°C ± 2°C <sup>1</sup> 1 day in an aerobic atmosphere on Tryptic Soy agar Motility Remel™ Motility Test Medium w/TTC Indicator for 1 day at 37°C in an aerobic atmosphere VITEK® MS (MALDI-TOF)	Gram-negative rods Report results  Growth  Report results  <i>A. baumannii</i>	Gram-negative rods Circular, convex, entire, smooth and cream (Figure 1) Growth  Motile  <i>A. baumannii</i> (99.9%)
<b>Antibiotic Susceptibility Profile<sup>2,3</sup></b> Amikacin Ampicillin/sulbactam Cefepime Ceftriaxone Ceftazidime Ciprofloxacin Colistin Gentamicin Imipenem Levofloxacin Meropenem Trimethoprim/sulfamethoxazole Tobramycin Tetracycline	Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive	Sensitive (4 to 6 µg/mL) Sensitive (1 µg/mL) Sensitive (1.5 µg/mL) Intermediate (12 to 16 µg/mL) <sup>4</sup> Sensitive (4 µg/mL) Sensitive (≤ 0.25 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (0.38 µg/mL) Sensitive (≤ 2 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (1.5 µg/mL)
<b>Genotypic Analysis</b> Sequencing of 16S ribosomal RNA gene (1470 base pairs)	≥ 99% sequence identity to <i>A. baumannii</i> , strain MRSN 3658 (GenBank: VHEV01000059.1)	100% sequence identity to <i>A. baumannii</i> , strain MRSN 3658 (GenBank: VHEV01000059.1)
<b>Purity</b> 7 days at 37°C in an aerobic atmosphere with and without 5% CO <sub>2</sub> on Tryptic Soy agar	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology

TEST	SPECIFICATIONS	RESULTS
Viability	Growth	Growth

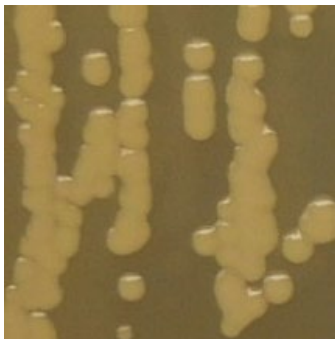
<sup>1</sup>Growth at 44°C differentiates *A. baumannii* from *A. calcoaceticus* and *A. pittii*, which do not grow at 44°C.

<sup>2</sup>Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S28 (2018)

<sup>3</sup>Antibiotic susceptibility was tested using a combination of VITEK2 GN82, Sensititre GNX2F AST and E-test strips.

<sup>4</sup>The susceptibility result for this antibiotic is within one doubling dilution of specification, which is considered an equivalent result.

Figure 1: Colony Morphology



/Heather Couch/  
Heather Couch

Program Manager or designee, ATCC Federal Solutions

22 NOV 2021

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**Acinetobacter baumannii, Strain MRSN 3692**

**Catalog No. NR-52163**

This reagent is the tangible property of the U.S. Government.

**Product Description:**

*Acinetobacter baumannii* (*A. baumannii*), strain MRSN 3692 was isolated in in 2010 from a human wound sample in Europe as part of a global surveillance program. *A. baumannii*, strain MRSN 3692 was deposited as sensitive to amikacin, ampicillin/sulbactam, cefepime, ceftazidime, ciprofloxacin, colistin, gentamicin, imipenem, levofloxacin, meropenem, tetracycline, tobramycin and trimethoprim/sulfamethoxazole and intermediately resistant to ceftriaxone. NR-52163 lot 70041724 was produced by inoculation of the deposited material into Tryptic Soy broth and grown for 1 day at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar kolles, which were grown for 1 day at 37°C in an aerobic atmosphere to produce this lot. Quality control testing was completed under propagation conditions unless otherwise noted.

**Lot: 70041724**

**Manufacturing Date: 03FEB2021**

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TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis</b> Cellular morphology Colony morphology  Growth at 44°C ± 2°C <sup>1</sup> 1 day in an aerobic atmosphere on Tryptic Soy agar Motility Remel™ Motility Test Medium w/TTC Indicator for 1 day at 37°C in an aerobic atmosphere VITEK® MS (MALDI-TOF)	Gram-negative rods Report results  Growth  Report results  <i>A. baumannii</i>	Gram-negative rods Circular, convex, entire, smooth and cream (Figure 1) Growth  Non-motile  <i>A. baumannii</i> (99.9%)
<b>Antibiotic Susceptibility Profile<sup>2,3</sup></b> Amikacin Ampicillin/sulbactam Cefepime Ceftriaxone Ceftazidime Ciprofloxacin Colistin Gentamicin Imipenem Levofloxacin Meropenem Trimethoprim/sulfamethoxazole Tobramycin Tetracycline	Sensitive Sensitive Sensitive Intermediate Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive	Sensitive (8 µg/mL) Sensitive (2 µg/mL) Sensitive (4 µg/mL) Intermediate (16 µg/mL) Sensitive (8 µg/mL) Sensitive (0.5 µg/mL) Sensitive (≤ 0.25 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 2 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 0.5 µg/mL) Sensitive (≤ 1 µg/mL) Intermediate (8 µg/mL) <sup>4</sup>
<b>Genotypic Analysis</b> Sequencing of 16S ribosomal RNA gene (~ 1470 base pairs)	≥ 99% sequence identity to <i>A. baumannii</i> , strain MRSN 3692 (GenBank: VHEU01000083.1)	100% sequence identity to <i>A. baumannii</i> , strain MRSN 3692 (GenBank: VHEU01000083.1)
<b>Purity</b> 7 days at 37°C in an aerobic atmosphere with and without 5% CO <sub>2</sub> on Tryptic Soy agar	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology



TEST	SPECIFICATIONS	RESULTS
Viability	Growth	Growth

<sup>1</sup>Growth at 44°C differentiates *A. baumannii* from *A. calcoaceticus* and *A. pittii*, which do not grow at 44°C.

<sup>2</sup>Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S28 (2018)

<sup>3</sup>Antibiotic susceptibility was tested using a combination of VITEK2 GN82, Sensititre GNX2F AST and E-test strips.

<sup>4</sup>The susceptibility result for this antibiotic is within one doubling dilution of specification, which is considered an equivalent result.

Figure 1: Colony Morphology



/Heather Couch/  
Heather Couch

23 NOV 2021

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**Acinetobacter baumannii, Strain MRSN 3874**

**Catalog No. NR-52164**

This reagent is the tangible property of the U.S. Government.

**Product Description:**

*Acinetobacter baumannii* (*A. baumannii*), strain MRSN 3874 was isolated in 2010 from a human wound in Europe as part of a global surveillance program. *A. baumannii*, strain MRSN 3874 was deposited as sensitive to colistin and tetracycline and resistant to amikacin, ceftazidime, ciprofloxacin, ceftriaxone, cefepime, gentamicin, imipenem, trimethoprim/sulfamethoxazole, levofloxacin, meropenem, tobramycin and ampicillin/sulbactam. NR-52164 lot 70038533 was produced by inoculation of the deposited material into Tryptic Soy broth and grown for 1 day at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar kolles, which were grown for 1 day at 37°C in an aerobic atmosphere to produce this lot. Quality control testing was completed under propagation conditions unless otherwise noted.

**Lot: 70038533**

**Manufacturing Date: 26AUG2020**

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TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis</b> Cellular morphology Colony morphology  Growth at 44°C ± 2°C <sup>1</sup> 1 day in an aerobic atmosphere on Tryptic Soy agar Motility Remel™ Motility Test Medium w/TTC Indicator for 1 day at 37°C in an aerobic atmosphere VITEK® GN Card VITEK® MS (MALDI-TOF)	Gram-negative rods Report results  Growth  Report results  <i>A. baumannii</i> (≥ 89%) <i>A. baumannii</i>	Gram-negative rods Circular, convex, entire, smooth and cream (Figure 1) Growth  Non-motile  <i>A. baumannii</i> (99%) <i>A. baumannii</i> (99.9%)
<b>Antibiotic Susceptibility Profile<sup>2,3</sup></b> Amikacin Cefepime Ceftazidime Ciprofloxacin Colistin Gentamicin Imipenem Levofloxacin Meropenem Tobramycin Trimethoprim/sulfamethoxazole Ampicillin/sulbactam Ceftriaxone Tetracycline	Resistant Resistant Resistant Resistant Sensitive Resistant Resistant Resistant Resistant Resistant Resistant Resistant Resistant Resistant Resistant Sensitive	Resistant (> 256 µg/mL) Resistant (64 µg/mL) Resistant (≥ 64 µg/mL) Resistant (≥ 4 µg/mL) Sensitive (≤ 0.25 µg/mL) Resistant (≥ 16 µg/mL) Resistant (> 8 µg/mL) Resistant (> 8 µg/mL) Resistant (≥ 16 µg/mL) Resistant (48 µg/mL) Resistant (> 4 µg/mL) Resistant (48 µg/mL) Resistant (≥ 64 µg/mL) Sensitive (12 µg/mL)
<b>Genotypic Analysis</b> Sequencing of 16S ribosomal RNA gene (~ 1480 base pairs)	≥ 99% sequence identity to <i>A. baumannii</i> , strain MRSN 3874 (GenBank: VHET01000101.1)	99.9% sequence identity to <i>A. baumannii</i> , strain MRSN 3874 (GenBank: VHET01000101.1)

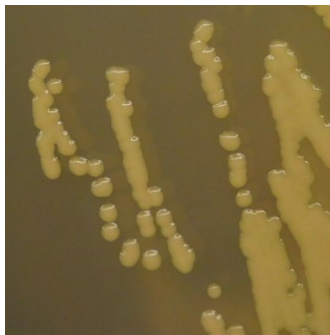
TEST	SPECIFICATIONS	RESULTS
<b>Purity</b> 7 days at 37°C in an aerobic atmosphere with and without 5% CO <sub>2</sub> on Tryptic Soy agar	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology
<b>Viability</b>	Growth	Growth

<sup>1</sup>Growth at 44°C differentiates *A. baumannii* from *A. calcoaceticus* and *A. pittii*, which do not grow at 44°C.

<sup>2</sup>Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S28 (2018)

<sup>3</sup>Antibiotic susceptibility was tested using a combination of VITEK®2 GN82, Sensititre GNX2F AST and E-test strips.

Figure 1: Colony Morphology



/Heather Couch/

Heather Couch

28 APR 2021

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**Acinetobacter baumannii, Strain MRSN 4484**

**Catalog No. NR-52165**

This reagent is the tangible property of the U.S. Government.

**Product Description:**

*Acinetobacter baumannii* (*A. baumannii*), strain MRSN 4484 was isolated in 2011 from a human tissue sample in the USA as part of a global surveillance program. *A. baumannii*, strain MRSN 4484 was deposited as sensitive to colistin and resistant to amikacin, ceftazidime, ciprofloxacin, ceftriaxone, cefepime, gentamicin, imipenem, trimethoprim/sulfamethoxazole, levofloxacin, meropenem, tetracycline, tobramycin and ampicillin/sulbactam. NR-52165 lot 70038534 was produced by inoculation of the deposited material into Tryptic Soy broth and grown for 1 day at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar kolles, which were grown for 1 day at 37°C in an aerobic atmosphere to produce this lot. Quality control testing was completed under propagation conditions unless otherwise noted.

**Lot: 70038534**

**Manufacturing Date: 26AUG2020**

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TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis</b> Cellular morphology Colony morphology  Growth at 44°C ± 2°C <sup>1</sup> 1 day in an aerobic atmosphere on Tryptic Soy agar Motility Remel™ Motility Test Medium w/TTC Indicator for 1 day at 37°C in an aerobic atmosphere VITEK® GN Card VITEK® MS (MALDI-TOF)	Gram-negative rods Report results  Growth  Report results  <i>A. baumannii</i> (≥ 89%) <i>A. baumannii</i>	Gram-negative rods Circular, convex, entire, mucoid and cream (Figure 1) Growth  Non-motile  <i>A. baumannii</i> (99%) <i>A. baumannii</i> (99.9%)
<b>Antibiotic Susceptibility Profile<sup>2,3</sup></b> Amikacin Cefepime Ceftazidime Ciprofloxacin Colistin Gentamicin Imipenem Levofloxacin Meropenem Tobramycin Trimethoprim/sulfamethoxazole Ampicillin/sulbactam Ceftriaxone Tetracycline	Resistant Resistant Resistant Resistant Sensitive Resistant Resistant Resistant Resistant Resistant Resistant Resistant Resistant Resistant Resistant Resistant Resistant Resistant Resistant	Resistant (> 256 µg/mL) Resistant (48 to 64 µg/mL) Resistant (≥ 64 µg/mL) Resistant (≥ 4 µg/mL) Sensitive (≤ 0.25 µg/mL) Resistant (≥ 16 µg/mL) Resistant (> 8 µg/mL) Intermediate (4 µg/mL) <sup>4</sup> Resistant (≥ 16 µg/mL) Sensitive (≤ 1 to 2 µg/mL) <sup>5</sup> Resistant (> 4 µg/mL) Resistant (48 µg/mL) Resistant (≥ 64 µg/mL) Resistant (≥ 256 µg/mL)
<b>Genotypic Analysis</b> Sequencing of 16S ribosomal RNA gene (~ 1480 base pairs)	≥ 99% sequence identity to <i>A. baumannii</i> , strain MRSN 4484 (GenBank: VHER01000112.1)	99.9% sequence identity to <i>A. baumannii</i> , strain MRSN 4484 (GenBank: VHER01000112.1)

TEST	SPECIFICATIONS	RESULTS
<b>Purity</b> 7 days at 37°C in an aerobic atmosphere with and without 5% CO <sub>2</sub> on Tryptic Soy agar	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology
<b>Viability</b>	Growth	Growth

<sup>1</sup>Growth at 44°C differentiates *A. baumannii* from *A. calcoaceticus* and *A. pittii*, which do not grow at 44°C.

<sup>2</sup>Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S28 (2018)

<sup>3</sup>Antibiotic susceptibility was tested using a combination of VITEK<sup>®</sup>2 GN82, Sensititre GNX2F AST and E-test strips.

<sup>4</sup>The susceptibility result for this antibiotic is within one doubling dilution of specification, which is considered an equivalent result.

<sup>5</sup>*A. baumannii*, strain MRSN 4484 was deposited as resistant to tobramycin, but showed a MIC of ≤ 2 µg per mL (interpreted as sensitive) for this antibiotic during QC testing. Testing was performed in duplicate.

Figure 1: Colony Morphology



/Heather Couch/

Heather Couch

28 APR 2021

Program Manager or designee, ATCC Federal Solutions

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**Acinetobacter baumannii, Strain MRSN 4943**

**Catalog No. NR-52166**

This reagent is the tangible property of the U.S. Government.

**Product Description:**

*Acinetobacter baumannii* (*A. baumannii*), strain MRSN 4943 was isolated in 2011 from a human respiratory sample in the USA as part of a global surveillance program. *A. baumannii*, strain MRSN 4943 was deposited as sensitive to colistin, imipenem and meropenem, intermediately resistant to amikacin and tobramycin, and resistant to ampicillin/sulbactam, cefepime, ceftazidime, ceftriaxone, ciprofloxacin, gentamicin, levofloxacin, tetracycline and trimethoprim/sulfamethoxazole. NR-52166 lot 70038535 was produced by inoculation of the deposited material into Tryptic Soy broth and grown for 1 day at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar kolles, which were grown for 1 day at 37°C in an aerobic atmosphere to produce this lot. Quality control testing was completed under propagation conditions unless otherwise noted.

**Lot: 70038535**

**Manufacturing Date: 27AUG2020**

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TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis</b> Cellular morphology Colony morphology  Growth at 44°C ± 2°C <sup>1</sup> 1 day in an aerobic atmosphere on Tryptic Soy agar Motility Remel™ Motility Test Medium w/TTC Indicator for 1 day at 37°C in an aerobic atmosphere VITEK® MS (MALDI-TOF)	Gram-negative rods Report results  Growth  Report results  <i>A. baumannii</i>	Gram-negative rods Circular, convex, entire, smooth and cream (Figure 1) Growth  Non-motile  <i>A. baumannii</i> (99.9%)
<b>Antibiotic Susceptibility Profile<sup>2,3</sup></b> Amikacin Ampicillin/sulbactam Cefepime Ceftriaxone Ceftazidime Ciprofloxacin Colistin Gentamicin Imipenem Levofloxacin Meropenem Trimethoprim/sulfamethoxazole Tobramycin Tetracycline	Intermediate Resistant Resistant Resistant Resistant Resistant Sensitive Resistant Sensitive Resistant Sensitive Resistant Intermediate Resistant	Intermediate (32 µg/mL) Resistant (32 µg/mL) Resistant (32 µg/mL) Resistant (> 32 µg/mL) Resistant (32 µg/mL) Resistant (≥ 4 µg/mL) Sensitive (≤ 0.25 µg/mL) Resistant (≥ 16 µg/mL) Sensitive (≤ 1 µg/mL) Resistant (8 to 16 µg/mL) Sensitive (≤ 1 µg/mL) Resistant (> 4 µg/mL) Intermediate (8 µg/mL) Resistant (> 256 µg/mL)
<b>Genotypic Analysis</b> Sequencing of 16S ribosomal RNA gene (1480 base pairs)	≥ 99% sequence identity to <i>A. baumannii</i> , strain MRSN 4943 (GenBank: VHEM01000084.1)	100% sequence identity to <i>A. baumannii</i> , strain MRSN 4943 (GenBank: VHEM01000084.1)
<b>Purity</b> 7 days at 37°C in an aerobic atmosphere with and without 5% CO <sub>2</sub> on Tryptic Soy agar	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology

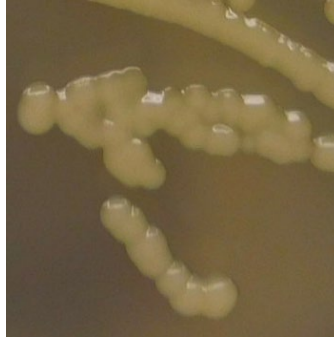
TEST	SPECIFICATIONS	RESULTS
Viability	Growth	Growth

<sup>1</sup>Growth at 44°C differentiates *A. baumannii* from *A. calcoaceticus* and *A. pittii*, which do not grow at 44°C.

<sup>2</sup>Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S28 (2018)

<sup>3</sup>Antibiotic susceptibility was tested using a combination of VITEK2 GN82, Sensititre GNX2F AST and E-test strips.

Figure 1: Colony Morphology



/Heather Couch/  
Heather Couch

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23 NOV 2021

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***Acinetobacter baumannii*, Strain MRSN 5969**
**Catalog No. NR-52167**

This reagent is the tangible property of the U.S. Government.

**Product Description:**

*Acinetobacter baumannii* (*A. baumannii*), MRSN 5969 was isolated in 2011 from a human wound sample in Europe as part of a global surveillance program. *A. baumannii*, strain MRSN 5969 was deposited as sensitive to amikacin, ampicillin/sulbactam, cefepime, ceftazidime, ceftriaxone, ciprofloxacin, colistin, gentamicin, imipenem, levofloxacin, meropenem, tobramycin, trimethoprim/sulfamethoxazole and tetracycline. NR-52167 lot 70041726 was produced by inoculation of the deposited material into Tryptic Soy broth and grown for 1 day at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar kolles, which were grown for 1 day at 37°C in an aerobic atmosphere to produce this lot. Quality control testing was completed under propagation conditions unless otherwise noted.

**Lot: 70041726**
**Manufacturing Date: 03FEB2021**

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TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis</b> Cellular morphology Colony morphology  Growth at 44°C ± 2°C <sup>1</sup> 1 day in an aerobic atmosphere on Tryptic Soy agar  Motility Remel™ Motility Test Medium w/TTC Indicator for 1 day at 37°C in an aerobic atmosphere  VITEK® MS (MALDI-TOF)	Gram-negative rods Report results  Growth  Report results  <i>A. baumannii</i>	Gram-negative rods Circular, convex, entire, smooth and cream (Figure 1) Growth  Non-motile  <i>A. baumannii</i> (99.9%)
<b>Antibiotic Susceptibility Profile<sup>2,3</sup></b> Amikacin Ampicillin/sulbactam Cefepime Ceftriaxone Ceftazidime Ciprofloxacin Colistin Gentamicin Imipenem Levofloxacin Meropenem Trimethoprim/sulfamethoxazole Tobramycin Tetracycline	Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive	Sensitive (8 µg/mL) Sensitive (1 µg/mL) Sensitive (1.5 µg/mL) Sensitive (8 µg/mL) Sensitive (4 µg/mL) Sensitive (≤ 0.5 µg/mL) Sensitive (≤ 0.25 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Resistant (> 256 µg/mL) <sup>4</sup>
<b>Genotypic Analysis</b> Sequencing of 16S ribosomal RNA gene (~ 1110 base pairs)	≥ 99% sequence identity to <i>A. baumannii</i> , strain MRSN 5969 (GenBank: VHEL01000119.1)	99.8% sequence identity to <i>A. baumannii</i> , strain MRSN 5969 (GenBank: VHEL01000119.1)
<b>Purity</b> 7 days at 37°C in an aerobic atmosphere with and without 5% CO <sub>2</sub> on Tryptic Soy agar	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology



TEST	SPECIFICATIONS	RESULTS
Viability	Growth	Growth

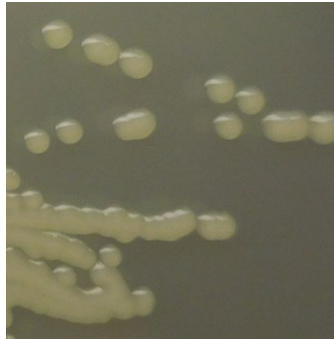
<sup>1</sup>Growth at 44°C differentiates *A. baumannii* from *A. calcoaceticus* and *A. pittii*, which do not grow at 44°C.

<sup>2</sup>Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S28 (2018)

<sup>3</sup>Antibiotic susceptibility was tested using a combination of VITEK<sup>®</sup>2 GN82, Sensititre™ GNX2F AST and E-test strips.

<sup>4</sup>*A. baumannii*, strain MRSN 5969 was deposited as sensitive to tetracycline, but showed a MIC of > 256 µg per mL (interpreted as resistant) for this antibiotic during QC testing. Testing was performed in duplicate.

Figure 1: Colony Morphology



/Heather Couch/  
Heather Couch

08 FEB 2022

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***Acinetobacter baumannii*, Strain MRSN 6541**

**Catalog No. NR-52168**

This reagent is the tangible property of the U.S. Government.

**Product Description:**

*Acinetobacter baumannii* (*A. baumannii*), strain MRSN 6541 was isolated in 2012 from a human wound in the United States as part of a global surveillance program. *A. baumannii*, strain MRSN 6541 was deposited as sensitive to amikacin, ceftazidime, colistin, gentamicin, tobramycin and tetracycline and resistant to ciprofloxacin, cefepime, imipenem, levofloxacin, meropenem, trimethoprim/sulfamethoxazole and ampicillin/sulbactam, with intermediate resistance to ceftriaxone. NR-52168 lot 70040778 was produced by inoculation of the deposited material into Tryptic Soy broth and grown for 1 day at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar kolles, which were grown for 1 day at 37°C in an aerobic atmosphere to produce this lot. Quality control testing was completed under propagation conditions unless otherwise noted.

**Lot: 70040778**

**Manufacturing Date: 11DEC2020**

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TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis</b> Cellular morphology Colony morphology  Growth at 44°C ± 2°C <sup>1</sup> 1 day in an aerobic atmosphere on Tryptic Soy agar Motility Remel™ Motility Test Medium w/TTC Indicator for 1 day at 37°C in an aerobic atmosphere VITEK® GN card VITEK® MS (MALDI-TOF)	Gram-negative rods Report results  Growth  Report results  <i>A. baumannii</i> complex <i>A. baumannii</i>	Gram-negative rods Circular, convex, entire, smooth and cream (Figure 1) Growth  Motile  <i>A. baumannii</i> complex <sup>2</sup> <i>A. baumannii</i> (99.9%)
<b>Antibiotic Susceptibility Profile<sup>3,4</sup></b> Amikacin Ampicillin/sulbactam Cefepime Ceftriaxone Ceftazidime Ciprofloxacin Colistin Gentamicin Imipenem Levofloxacin Meropenem Trimethoprim/sulfamethoxazole Tobramycin Tetracycline	Sensitive Resistant Resistant Intermediate Sensitive Resistant Sensitive Sensitive Resistant Resistant Resistant Resistant Resistant Sensitive Sensitive	Sensitive (≤ 4 µg/mL) Intermediate (12 µg/mL) <sup>5</sup> Resistant (≥ 16 µg/mL) <b>Resistant (≥ 16 µg/mL)<sup>6</sup></b> Intermediate (16 µg/mL) <sup>5</sup> Resistant (≥ 4 µg/mL) Sensitive (≤ 0.5 µg/mL) Sensitive (≤ 1 µg/mL) Resistant (> 8 µg/mL) Resistant (> 8 µg/mL) Resistant (>8 µg/mL) Resistant (≥ 4 µg/mL) Sensitive (≤ 1 µg/mL) Intermediate (8 to 12 µg/mL) <sup>5</sup>
<b>Genotypic Analysis</b> Sequencing of 16S ribosomal RNA gene (~1470 base pairs)	≥ 99% sequence identity to <i>A. baumannii</i> , strain MRSN 6541 (GenBank: VHEK01000095.1)	99.9% sequence identity to <i>A. baumannii</i> , strain MRSN 6541 (GenBank: VHEK01000095.1)

TEST	SPECIFICATIONS	RESULTS
<b>Purity</b> 7 days at 37°C in an aerobic atmosphere with and without 5% CO <sub>2</sub> on Tryptic Soy agar	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology
<b>Viability</b>	Growth	Growth

<sup>1</sup>Growth at 44°C differentiates *A. baumannii* from *A. calcoaceticus* and *A. pittii*, which do not grow at 44°C.

<sup>2</sup>VITEK® GN card was used to confirm to genus.

<sup>3</sup>Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S28 (2018)

<sup>4</sup>Antibiotic susceptibility was tested using a combination of VITEK2 GN82, Sensititre GNX2F AST and E-test strips.

<sup>5</sup>The susceptibility result for this antibiotic is within one doubling dilution of specification, which is considered an equivalent result.

<sup>6</sup>*A. baumannii*, strain MRSN 6541 was deposited as intermediate to ceftriaxone but showed a MIC of ≥ 16 µg/mL (interpreted as resistant) for ceftriaxone during QC testing. Testing was performed in duplicate.

Figure 1: Colony Morphology



/Heather Couch/  
Heather Couch

20 DEC 2021

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***Acinetobacter baumannii*, Strain MRSN 7067**

**Catalog No. NR-52169**

This reagent is the tangible property of the U.S. Government.

**Product Description:**

*Acinetobacter baumannii* (*A. baumannii*), strain MRSN 7067 was isolated in 2003 from a human blood sample in the USA as part of a global surveillance program. *A. baumannii*, strain MRSN 7067 was deposited as sensitive to amikacin, colistin, imipenem, meropenem and ampicillin/sulbactam, intermediately resistant to cefepime and resistant to ceftazidime, ceftriaxone, ciprofloxacin, gentamicin, levofloxacin, tetracycline, tobramycin and trimethoprim/sulfamethoxazole. NR-52169 lot 70040780 was produced by inoculation of the deposited material into Tryptic Soy broth and grown for 1 day at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar kolles, which were grown for 1 day at 37°C in an aerobic atmosphere to produce this lot. Quality control testing was completed under propagation conditions unless otherwise noted.

**Lot: 70040780**

**Manufacturing Date: 11DEC2020**

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TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis</b> Cellular morphology Colony morphology  Growth at 44°C ± 2°C <sup>1</sup> 1 day in an aerobic atmosphere on Tryptic Soy agar Motility Remel™ Motility Test Medium w/TTC Indicator for 1 day at 37°C in an aerobic atmosphere VITEK® MS (MALDI-TOF)	Gram-negative rods Report results  Growth  Report results  <i>A. baumannii</i>	Gram-negative rods Circular, convex, entire, smooth and cream (Figure 1) Growth  Motile  <i>A. baumannii</i> (99.9%)
<b>Antibiotic Susceptibility Profile<sup>2,3</sup></b> Amikacin Ampicillin/sulbactam Cefepime Ceftriaxone Ceftazidime Ciprofloxacin Colistin Gentamicin Imipenem Levofloxacin Meropenem Trimethoprim/sulfamethoxazole Tobramycin Tetracycline	Sensitive Sensitive Intermediate Resistant Resistant Resistant Resistant Sensitive Resistant Sensitive Resistant Sensitive Resistant Resistant Resistant	Sensitive (≤ 4 µg/mL) Sensitive (1.5 µg/mL) Intermediate (16 to 24 µg/mL) Resistant (≥ 32 µg/mL) Resistant (≥ 64 µg/mL) Resistant (≥ 4 µg/mL) Sensitive (2 µg/mL) Resistant (≥ 16 µg/mL) Sensitive (≤ 2 µg/mL) Resistant (8 µg/mL) Sensitive (≤ 1 µg/mL) Resistant (> 4 µg/mL) <b>Sensitive (4 µg/mL)<sup>4</sup></b> Resistant (48 µg/mL)
<b>Genotypic Analysis</b> Sequencing of 16S ribosomal RNA gene (~ 1480 base pairs)	≥ 99% sequence identity to <i>A. baumannii</i> , strain MRSN 7067 (GenBank: VHEJ01000075.1)	100% sequence identity to <i>A. baumannii</i> , strain MRSN 7067 (GenBank: VHEJ01000075.1)

TEST	SPECIFICATIONS	RESULTS
<b>Purity</b> 7 days at 37°C in an aerobic atmosphere with and without 5% CO <sub>2</sub> on Tryptic Soy agar	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology
<b>Viability</b>	Growth	Growth

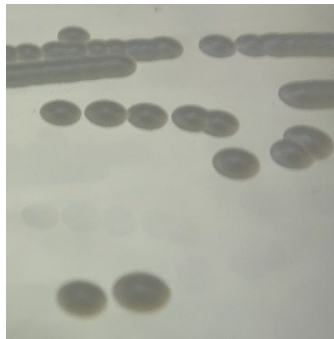
<sup>1</sup>Growth at 44°C differentiates *A. baumannii* from *A. calcoaceticus* and *A. pittii*, which do not grow at 44°C.

<sup>2</sup>Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S28 (2018)

<sup>3</sup>Antibiotic susceptibility was tested using a combination of VITEK<sup>®</sup>2 GN82, Sensititre GNX2F AST and E-test strips.

<sup>4</sup>*A. baumannii*, strain MRSN 7067 was deposited as being resistant to tobramycin. Repeated antibiotic susceptibility testing determined that for strain MRSN 7067, the tobramycin MIC is 4 µg per mL, which is interpreted as sensitive.

**Figure 1: Colony Morphology**



/Heather Couch/  
Heather Couch

29 NOV 2021

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**Acinetobacter baumannii, Strain MRSN 7113**

**Catalog No. NR-52170**

This reagent is the tangible property of the U.S. Government.

**Product Description:**

*Acinetobacter baumannii* (*A. baumannii*), strain MRSN 7113 was isolated in 2004 from a wound in the United States as part of a global surveillance program. *A. baumannii*, strain MRSN 7113 was deposited as sensitive to amikacin, ceftazidime, colistin, ciprofloxacin, cefepime, gentamicin, imipenem, levofloxacin, meropenem, trimethoprim/sulfamethoxazole, tobramycin, tetracycline and ampicillin/sulbactam and intermediately resistant to ceftriaxone. NR-52170 lot 70041728 was produced by inoculation of the deposited material into Tryptic Soy broth and grown for 1 day at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar kolles, which were grown for 1 day at 37°C in an aerobic atmosphere to produce this lot. Quality control testing was completed under propagation conditions unless otherwise noted.

**Lot: 70041728**

**Manufacturing Date: 03FEB2021**

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TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis</b> Cellular morphology Colony morphology  Growth at 44°C ± 2°C <sup>1</sup> 1 day in an aerobic atmosphere on Tryptic Soy agar Motility Remel™ Motility Test Medium w/TTC Indicator for 1 day at 37°C in an aerobic atmosphere VITEK® MS (MALDI-TOF)	Gram-negative rods Report results  Growth  Report results  <i>A. baumannii</i>	Gram-negative rods Circular, convex, entire, smooth and cream (Figure 1) Growth  Motile  <i>A. baumannii</i> (99.9%)
<b>Antibiotic Susceptibility Profile<sup>2,3</sup></b> Amikacin Ampicillin/sulbactam Cefepime Ceftriaxone Ceftazidime Ciprofloxacin Colistin Gentamicin Imipenem Levofloxacin Meropenem Trimethoprim/sulfamethoxazole Tobramycin Tetracycline	Sensitive Sensitive Sensitive Intermediate Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive	Sensitive (8 µg/mL) Sensitive (2 µg/mL) Sensitive (3 µg/mL) Intermediate (32 µg/mL) Intermediate (16 µg/mL) <sup>4</sup> Sensitive (1 µg/mL) Sensitive (≤ 2 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 0.5 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (4 µg/mL)
<b>Genotypic Analysis</b> Sequencing of 16S ribosomal RNA gene (~ 1470 base pairs)	≥ 99% sequence identity to <i>A. baumannii</i> , strain MRSN 7113 (GenBank: VHEI01000069.1)	99.8% sequence identity to <i>A. baumannii</i> , strain MRSN 7113 (GenBank: VHEI01000069.1)
<b>Purity</b> 7 days at 37°C in an aerobic atmosphere with and without 5% CO <sub>2</sub> on Tryptic Soy agar	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology

TEST	SPECIFICATIONS	RESULTS
Viability	Growth	Growth

<sup>1</sup>Growth at 44°C differentiates *A. baumannii* from *A. calcoaceticus* and *A. pittii*, which do not grow at 44°C.

<sup>2</sup>Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S28 (2018)

<sup>3</sup>Antibiotic susceptibility was tested using a combination of VITEK<sup>®</sup>2 GN82, Sensititre™ GNX2F AST and E-test strips.

<sup>4</sup>Susceptibility result for this antibiotic is within one doubling dilution of specification, which is considered an equivalent result.

Figure 1: Colony Morphology



/Heather Couch/  
Heather Couch

23 APR 2021

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**Acinetobacter baumannii, Strain MRSN 7124**

**Catalog No. NR-52171**

This reagent is the tangible property of the U.S. Government.

**Product Description:**

*Acinetobacter baumannii* (*A. baumannii*), strain MRSN 7124 was isolated in 2004 from a human wound sample in the United States as part of a global surveillance program. *A. baumannii*, strain MRSN 7124 was deposited as sensitive to amikacin, cefepime, ciprofloxacin, colistin, imipenem, levofloxacin, meropenem and ampicillin/sulbactam, intermediately resistant to ceftazidime and resistant to ceftriaxone, gentamicin, tobramycin, tetracycline and trimethoprim/sulfamethoxazole. NR-52171 lot 70040782 was produced by inoculation of the deposited material into Tryptic Soy broth and grown for 1 day at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar kolles, which were grown for 1 day at 37°C in an aerobic atmosphere to produce this lot. Quality control testing was completed under propagation conditions unless otherwise noted.

**Lot: 70040782**

**Manufacturing Date: 09DEC2020**

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TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis</b> Cellular morphology Colony morphology  Growth at 44°C ± 2°C <sup>1</sup> 1 day in an aerobic atmosphere on Tryptic Soy agar Motility Remel™ Motility Test Medium w/TTC Indicator for 1 day at 37°C in an aerobic atmosphere VITEK® MS (MALDI-TOF)	Gram-negative rods Report results  Growth  Report results  <i>A. baumannii</i>	Gram-negative rods Circular, convex, entire, smooth and cream (Figure 1) Growth  Motile  <i>A. baumannii</i> (99.9%)
<b>Antibiotic Susceptibility Profile<sup>2,3</sup></b> Amikacin Ampicillin/sulbactam Cefepime Ceftriaxone Ceftazidime Ciprofloxacin Colistin Gentamicin Imipenem Levofloxacin Meropenem Trimethoprim/sulfamethoxazole Tobramycin Tetracycline	Sensitive Sensitive Sensitive Resistant Intermediate Sensitive Sensitive Resistant Sensitive Sensitive Sensitive Resistant Resistant Resistant	Sensitive (≤16 µg/mL) Sensitive (3 to 6 µg/mL) Sensitive (8 µg/mL) Resistant (> 32 µg/mL) Intermediate (16 µg/mL) Sensitive (0.5 µg/mL) Sensitive (0.5 µg/mL) Resistant (≥ 16 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Resistant (> 4 µg/mL) Resistant (32 to 48 µg/mL) Resistant (> 256 µg/mL)
<b>Genotypic Analysis</b> Sequencing of 16S ribosomal RNA gene (~ 1470 base pairs)	≥ 99% sequence identity to <i>A. baumannii</i> , strain MRSN 7124 (GenBank: VHEH01000094.1)	100% sequence identity to <i>A. baumannii</i> , strain MRSN 7124 (GenBank: VHEH01000094.1)
<b>Purity</b> 7 days at 37°C in an aerobic atmosphere with and without 5% CO <sub>2</sub> on Tryptic Soy agar	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology



TEST	SPECIFICATIONS	RESULTS
Viability	Growth	Growth

<sup>1</sup>Growth at 44°C differentiates *A. baumannii* from *A. calcoaceticus* and *A. pittii*, which do not grow at 44°C.

<sup>2</sup>Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S28 (2018)

<sup>3</sup>Antibiotic susceptibility was tested using a combination of VITEK2 GN82, Sensititre GNX2F AST and E-test strips.

Figure 1: Colony Morphology



/Heather Couch/  
Heather Couch

20 DEC 2021

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**Acinetobacter baumannii, Strain MRSN 7137**

**Catalog No. NR-52172**

This reagent is the tangible property of the U.S. Government.

**Product Description:**

*Acinetobacter baumannii* (*A. baumannii*), strain MRSN 7137 was isolated in in 2004 from a human wound sample in the USA as part of a global surveillance program. *A. baumannii*, strain MRSN 7137 was deposited as sensitive to amikacin, ampicillin/sulbactam, colistin, imipenem, levofloxacin and tetracycline, intermediately resistant to ceftazidime, ciprofloxacin and cefepime and resistant to ceftriaxone, gentamicin, meropenem, tobramycin and trimethoprim/sulfamethoxazole. NR-52172 lot 70040784 was produced by inoculation of the deposited material into Tryptic Soy broth and grown for 1 day at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar kolles, which were grown for 1 day at 37°C in an aerobic atmosphere to produce this lot. Quality control testing was completed under propagation conditions unless otherwise noted.

**Lot: 70040784**

**Manufacturing Date: 06JAN2021**

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TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis</b> Cellular morphology Colony morphology  Growth at 44°C ± 2°C <sup>1</sup> 1 day in an aerobic atmosphere on Tryptic Soy agar Motility Remel™ Motility Test Medium w/TTC Indicator for 1 day at 37°C in an aerobic atmosphere VITEK® MS (MALDI-TOF)	Gram-negative rods Report results  Growth  Report results  <i>A. baumannii</i>	Gram-negative rods Circular, convex, entire, smooth and cream (Figure 1) Growth  Non-motile  <i>A. baumannii</i> (99.9%)
<b>Antibiotic Susceptibility Profile<sup>2,3</sup></b> Amikacin Ampicillin/sulbactam Cefepime Ceftriaxone Ceftazidime Ciprofloxacin Colistin Gentamicin Imipenem Levofloxacin Meropenem Trimethoprim/sulfamethoxazole Tobramycin Tetracycline	Sensitive Sensitive Intermediate Resistant Intermediate Intermediate Sensitive Resistant Sensitive Sensitive Resistant Resistant Resistant Sensitive	Sensitive (8 µg/mL) Intermediate (12 µg/mL) <sup>4</sup> Sensitive (8 µg/mL) <sup>4</sup> Resistant (≥ 64 µg/mL) Intermediate (16 µg/mL) Sensitive (1 µg/mL) <sup>4</sup> Sensitive (≤ 0.25 µg/mL) Resistant (≥ 16 µg/mL) Sensitive (2 µg/mL) Sensitive (≤ 1 µg/mL) Resistant (16 to 24 µg/mL) Resistant (> 4 µg/mL) Resistant (≥ 256 µg/mL) Sensitive (8 µg/mL)
<b>Genotypic Analysis</b> Sequencing of 16S ribosomal RNA gene (~ 1400 base pairs)	≥ 99% sequence identity to <i>A. baumannii</i> , strain MRSN 7137 (GenBank: VHEG01000054.1)	99.9% sequence identity to <i>A. baumannii</i> , strain MRSN 7137 (GenBank: VHEG01000054.1)
<b>Purity</b> 7 days at 37°C in an aerobic atmosphere with and without 5% CO <sub>2</sub> on Tryptic Soy agar	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology

TEST	SPECIFICATIONS	RESULTS
Viability	Growth	Growth

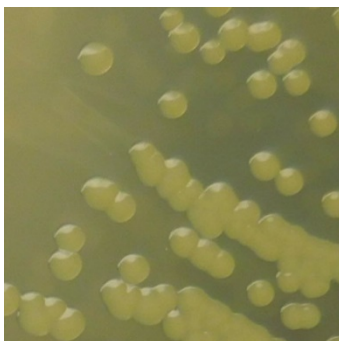
<sup>1</sup>Growth at 44°C differentiates *A. baumannii* from *A. calcoaceticus* and *A. pittii*, which do not grow at 44°C.

<sup>2</sup>Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S28 (2018)

<sup>3</sup>Antibiotic susceptibility was tested using a combination of VITEK2 GN82, Sensititre GNX2F AST and E-test strips.

<sup>4</sup>The susceptibility result for this antibiotic is within one doubling dilution of specification, which is considered an equivalent result.

Figure 1: Colony Morphology



/Heather Couch/  
Heather Couch

29 NOV 2021

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**Acinetobacter baumannii, Strain MRSN 7153**

**Catalog No. NR-52173**

This reagent is the tangible property of the U.S. Government.

**Product Description:**

*Acinetobacter baumannii* (*A. baumannii*), strain MRSN 7153 was isolated in 2004 from a human wound in the United States as part of a global surveillance program. *A. baumannii*, strain MRSN 7153 was deposited as sensitive to colistin, amikacin, ceftazidime, ciprofloxacin, cefepime, gentamicin, imipenem, trimethoprim/sulfamethoxazole, levofloxacin, meropenem, tobramycin, tetracycline and ampicillin/sulbactam and intermediately resistant to ceftriaxone. NR-52173 lot 70041730 was produced by inoculation of the deposited material into Tryptic Soy broth and grown for 1 day at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar kolles, which were grown for 1 day at 37°C in an aerobic atmosphere to produce this lot. Quality control testing was completed under propagation conditions unless otherwise noted.

**Lot: 70041730**

**Manufacturing Date: 29JAN2021**

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TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis</b> Cellular morphology Colony morphology  Growth at 44°C ± 2°C <sup>1</sup> 1 day in an aerobic atmosphere on Tryptic Soy agar Motility BBL™ Motility Test Medium w/TTC Indicator for 1 day at 37°C in an aerobic atmosphere VITEK® MS (MALDI-TOF)	Gram-negative rods Report results  Growth  Report results  <i>A. baumannii</i>	Gram-negative rods Circular, low convex, entire, smooth and cream (Figure 1) Growth  Non-motile  <i>A. baumannii</i> (99.9%)
<b>Antibiotic Susceptibility Profile<sup>2,3</sup></b> Amikacin Ampicillin/sulbactam Cefepime Ceftriaxone Ceftazidime Ciprofloxacin Colistin Gentamicin Imipenem Levofloxacin Meropenem Trimethoprim/sulfamethoxazole Tobramycin Tetracycline	Sensitive Sensitive Sensitive Intermediate Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive	Sensitive (4 to 6 µg/mL) Sensitive (1.5 µg/mL) Sensitive (1.5 to 2 µg/mL) Intermediate (16 µg/mL) Sensitive (4 µg/mL) Sensitive (≤ 0.25 µg/mL) Sensitive (≤ 0.25 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 0.5 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (4 µg/mL)
<b>Genotypic Analysis</b> Sequencing of 16S ribosomal RNA gene (1470 base pairs)	≥ 99% sequence identity to <i>A. baumannii</i> , strain MRSN 7153 (GenBank: VHEF01000128.1)	99.8% sequence identity to <i>A. baumannii</i> , strain MRSN 7153 (GenBank: VHEF01000128.1)
<b>Purity</b> 7 days at 37°C in an aerobic atmosphere with and without 5% CO <sub>2</sub> on Tryptic Soy agar	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology

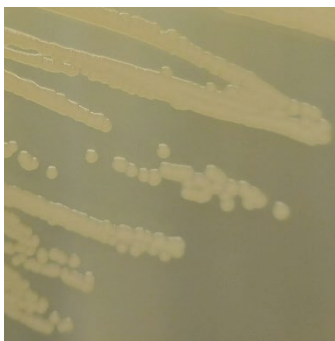
TEST	SPECIFICATIONS	RESULTS
Viability	Growth	Growth

<sup>1</sup>Growth at 44°C differentiates *A. baumannii* from *A. calcoaceticus* and *A. pittii*, which do not grow at 44°C.

<sup>2</sup>Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S28 (2018)

<sup>3</sup>Antibiotic susceptibility was tested using a combination of VITEK<sup>®</sup>2 GN82, Sensititre<sup>™</sup> GNX2F AST and E-test strips.

Figure 1: Colony Morphology



/Heather Couch/  
Heather Couch

Program Manager or designee, ATCC Federal Solutions

19 AUG 2021

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**Acinetobacter baumannii, Strain MRSN 7213**

**Catalog No. NR-52174**

This reagent is the tangible property of the U.S. Government.

**Product Description:**

*Acinetobacter baumannii* (*A. baumannii*), strain MRSN 7213 was isolated in 2003 from a human wound specimen in the USA as part of a global surveillance program. NR-52174 was deposited as sensitive to amikacin, ciprofloxacin, colistin, cefepime, imipenem, levofloxacin, meropenem, trimethoprim/sulfamethoxazole, ampicillin/sulbactam and tetracycline and resistant to ceftazidime, ceftriaxone, gentamicin and tobramycin. NR-52174 lot 70041733 was produced by inoculation of the deposited material into Tryptic Soy broth and grown for 1 day at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar kolles, which were grown for 1 day at 37°C in an aerobic atmosphere to produce this lot. Quality control testing was completed under propagation conditions unless otherwise noted.

**Lot: 70041733**

**Manufacturing Date: 29JAN2021**

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TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis</b> Cellular morphology Colony morphology  Growth at 44°C ± 2°C <sup>1</sup> 1 day in an aerobic atmosphere on Tryptic Soy agar  Motility BBL™ Motility Test Medium w/TTC Indicator for 1 day at 37°C in an aerobic atmosphere  VITEK® MS (MALDI-TOF)	Gram-negative rods Report results  Growth  Report results  <i>A. baumannii</i>	Gram-negative rods Circular, convex, entire, smooth and cream (Figure 1) Growth  Motile  <i>A. baumannii</i> (99.9%)
<b>Antibiotic Susceptibility Profile<sup>2,3</sup></b> Amikacin Ampicillin/sulbactam Cefepime Ceftriaxone Ceftazidime Ciprofloxacin Colistin Gentamicin Imipenem Levofloxacin Meropenem Trimethoprim/sulfamethoxazole Tobramycin Tetracycline	Sensitive Sensitive Sensitive Resistant Resistant Sensitive Sensitive Resistant Sensitive Sensitive Sensitive Sensitive Sensitive Resistant Sensitive	Sensitive (8 µg/mL) Sensitive (3 µg/mL) Sensitive (4 to 6 µg/mL) Resistant (≥ 64 µg/mL) Resistant (32 µg/mL) Sensitive (≤ 0.25 µg/mL) Sensitive (≤ 0.25 µg/mL) Resistant (≥ 256 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 0.5 µg/mL) Resistant (128 µg/mL) Sensitive (4 µg/mL)
<b>Genotypic Analysis</b> Sequencing of 16S ribosomal RNA gene (~ 1470 base pairs)	≥ 99% sequence identity to <i>A. baumannii</i> , strain MRSN 7213 (GenBank: VHEE01000054.1)	100% sequence identity to <i>A. baumannii</i> , strain MRSN 7213 (GenBank: VHEE01000054.1)
<b>Purity</b> 7 days at 37°C in an aerobic atmosphere with and without 5% CO <sub>2</sub> on Tryptic Soy agar	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology

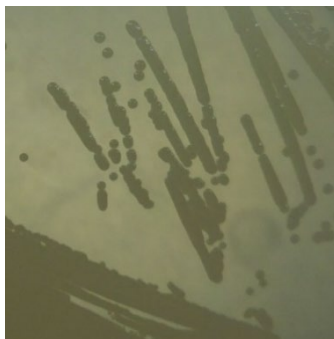
TEST	SPECIFICATIONS	RESULTS
Viability	Growth	Growth

<sup>1</sup>Growth at 44°C differentiates *A. baumannii* from *A. calcoaceticus* and *A. pittii*, which do not grow at 44°C.

<sup>2</sup>Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S28 (2018)

<sup>3</sup>Antibiotic susceptibility was tested using a combination of VITEK<sup>®</sup>2 GN82, Sensititre GNX2F AST and E-test strips.

Figure 1: Colony Morphology



/Heather Couch/

Heather Couch

30 NOV 2021

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**Acinetobacter baumannii, Strain MRSN 7251**

**Catalog No. NR-52175**

This reagent is the tangible property of the U.S. Government.

**Product Description:**

*Acinetobacter baumannii* (*A. baumannii*), strain MRSN 7251 was isolated in 2004 from a human wound sample in the USA as part of a global surveillance program. *A. baumannii*, strain MRSN 7251 was deposited as multi-locus sequence type (MLST) ST 32, sensitive to amikacin, colistin, imipenem, levofloxacin, meropenem and trimethoprim/sulfamethoxazole and resistant to cefepime, ceftazidime, ceftriaxone, ciprofloxacin, gentamicin, ampicillin/sulbactam, tetracycline and tobramycin. NR-52175 was produced by inoculation of the deposited material into Tryptic Soy broth and grown for 1 day at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar kolles, which were grown for 1 day at 37°C in an aerobic atmosphere to produce this lot. Quality control testing was completed under propagation conditions unless otherwise noted.

**Lot: 70040786**

**Manufacturing Date: 06JAN2021**

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TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis</b> Cellular morphology Colony morphology  Growth at 44°C ± 2°C <sup>1</sup> 1 day in an aerobic atmosphere on Tryptic Soy agar Motility Remel™ Motility Test Medium w/TTC Indicator for 1 day at 37°C in an aerobic atmosphere VITEK® MS (MALDI-TOF)	Gram-negative rods Report results  Growth  Report results  <i>A. baumannii</i>	Gram-negative rods Circular, convex, entire, smooth and cream (Figure 1) Growth  Non-motile  <i>A. baumannii</i> (99.9%)
<b>Antibiotic Susceptibility Profile<sup>2,3</sup></b> Amikacin Ampicillin/sulbactam Cefepime Ceftriaxone Ceftazidime Ciprofloxacin Colistin Gentamicin Imipenem Levofloxacin Meropenem Trimethoprim/sulfamethoxazole Tobramycin Tetracycline	Sensitive Resistant Resistant Resistant Resistant Resistant Sensitive Resistant Sensitive Sensitive Sensitive Sensitive Sensitive Resistant Resistant	Sensitive (16 µg/mL) Resistant (24 to 32 µg/mL) Resistant (> 256 µg/mL) Resistant (> 32 µg/mL) Resistant (≥ 64 µg/mL) Resistant (≥ 4 µg/mL) Sensitive (≤ 0.25 µg/mL) Resistant (128 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (< 0.5 µg/mL) Resistant (32 to 48 µg/mL) Resistant (> 256 µg/mL)
<b>Genotypic Analysis</b> Sequencing of 16S ribosomal RNA gene (~ 1480 base pairs)	≥ 99% sequence identity to <i>A. baumannii</i> , strain MRSN 7251 (GenBank: VHED01000109.1)	99.9% sequence identity to <i>A. baumannii</i> , strain MRSN 7251 (GenBank: VHED01000109.1)
<b>Purity</b> 7 days at 37°C in an aerobic atmosphere with and without 5% CO <sub>2</sub> on Tryptic Soy agar	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology



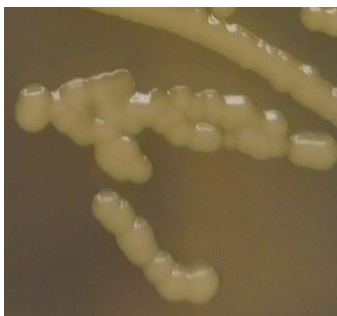
TEST	SPECIFICATIONS	RESULTS
Viability	Growth	Growth

<sup>1</sup>Growth at 44°C differentiates *A. baumannii* from *A. calcoaceticus* and *A. pittii*, which do not grow at 44°C.

<sup>2</sup>Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S28 (2018)

<sup>3</sup>Antibiotic susceptibility was tested using a combination of VITEK<sup>®</sup>2 GN82, Sensititre GNX2F AST and E-test strips.

Figure 1: Colony Morphology



/Heather Couch/

Heather Couch

Program Manager or designee, ATCC Federal Solutions

05 DEC 2021

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**Acinetobacter baumannii, Strain MRSN 7431**

**Catalog No. NR-52176**

This reagent is the tangible property of the U.S. Government.

**Product Description:**

*Acinetobacter baumannii* (*A. baumannii*), MRSN 7431 was isolated in 2005 from a human respiratory sample in the United States as part of a global surveillance program. *A. baumannii*, strain MRSN 7431 was deposited as multi-locus sequence type (MLST) ST 2, sensitive to amikacin, ampicillin/sulbactam, colistin, imipenem, meropenem and tobramycin, intermediately resistant to ceftazidime and resistant to cefepime, ceftriaxone, ciprofloxacin, gentamicin, levofloxacin, trimethoprim/sulfamethoxazole and tetracycline. NR-52176 was produced by inoculation of the deposited material into Tryptic Soy broth and grown for 1 day at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar kolles, which were grown for 1 day at 37°C in an aerobic atmosphere to produce this lot. Quality control testing was completed under propagation conditions unless otherwise noted.

**Lot: 70040788**

**Manufacturing Date: 11DEC2021**

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TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis</b> Cellular morphology Colony morphology  Growth at 44°C ± 2°C <sup>1</sup> 1 day in an aerobic atmosphere on Tryptic Soy agar  Motility BBL™ Motility Test Medium w/TTC Indicator for 1 day at 37°C in an aerobic atmosphere  VITEK® MS (MALDI-TOF)	Gram-negative rods Report results  Growth  Report results  <i>A. baumannii</i>	Gram-negative rods Circular, convex, entire, smooth and cream (Figure 1) Growth  Non-motile  <i>A. baumannii</i> (99.9%)
<b>Antibiotic Susceptibility Profile<sup>2,3</sup></b> Amikacin Ampicillin/sulbactam Cefepime Ceftriaxone Ceftazidime Ciprofloxacin Colistin Gentamicin Imipenem Levofloxacin Meropenem Trimethoprim/sulfamethoxazole Tobramycin Tetracycline	Sensitive Sensitive Resistant Resistant Intermediate Resistant Sensitive Resistant Sensitive Resistant Sensitive Resistant Resistant Sensitive Resistant	Sensitive (16 µg/mL) Sensitive (2 µg/mL) Resistant (≥ 256 µg/mL) Resistant (≥ 64 µg/mL) Intermediate (16 µg/mL) Resistant (≥ 4 µg/mL) Sensitive (≤ 0.25 µg/mL) Sensitive (≤ 1 µg/mL) <sup>4</sup> Sensitive (≤ 1 µg/mL) Resistant (8 µg/mL) Sensitive (≤ 1 µg/mL) Resistant (> 4 µg/mL) Sensitive (≤ 1 µg/mL) Resistant (≥ 256 µg/mL)
<b>Genotypic Analysis</b> Sequencing of 16S ribosomal RNA gene (~ 1480 base pairs)	≥ 99% sequence identity to <i>A. baumannii</i> , strain MRSN 7431 (GenBank: VHEC01000098.1)	100% sequence identity to <i>A. baumannii</i> , strain MRSN 7431 (GenBank: VHEC01000098.1)
<b>Purity</b> 7 days at 37°C in an aerobic atmosphere with and without 5% CO <sub>2</sub> on Tryptic Soy agar	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology

TEST	SPECIFICATIONS	RESULTS
Viability	Growth	Growth

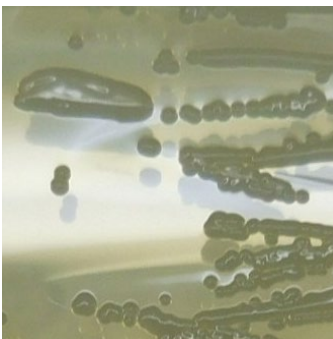
<sup>1</sup>Growth at 44°C differentiates *A. baumannii* from *A. calcoaceticus* and *A. pittii*, which do not grow at 44°C.

<sup>2</sup>Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S28 (2018)

<sup>3</sup>Antibiotic susceptibility was tested using a combination of VITEK<sup>®</sup>2 GN82, Sensititre™ GNX2F AST and E-test strips.

<sup>4</sup>*A. baumannii*, strain MRSN 7431 was deposited as resistant to gentamicin, but showed a MIC of ≤ 1 µg per mL (interpreted as sensitive) for this antibiotic during QC testing. Testing was performed in duplicate.

Figure 1: Colony Morphology



/Heather Couch/  
Heather Couch

05 FEB 2022

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**Acinetobacter baumannii, Strain MRSN 7446**

**Catalog No. NR-52177**

This reagent is the tangible property of the U.S. Government.

**Product Description:**

*Acinetobacter baumannii* (*A. baumannii*), strain MRSN 7446 was isolated in 2005 from a human wound sample in the USA as part of a global surveillance program. *A. baumannii*, strain MRSN 7446 was deposited as multi-locus sequence type (MLST) ST 963, sensitive to amikacin, ampicillin/sulbactam, cefepime, colistin, ceftazidime, ceftriaxone, ciprofloxacin, gentamicin, imipenem, meropenem, levofloxacin, tetracycline and tobramycin and resistant to trimethoprim/sulfamethoxazole. NR-52177 lot 70041735 was produced by inoculation of the deposited material into Tryptic Soy broth and grown for 1 day at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar kolles, which were grown for 1 day at 37°C in an aerobic atmosphere to produce this lot. Quality control testing was completed under propagation conditions unless otherwise noted.

**Lot: 70041735**

**Manufacturing Date: 29JAN2021**

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TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis</b> Cellular morphology Colony morphology  Growth at 44°C ± 2°C <sup>1</sup> 1 day in an aerobic atmosphere on Tryptic Soy agar Motility Remel™ Motility Test Medium w/TTC Indicator for 1 day at 37°C in an aerobic atmosphere  VITEK® MS (MALDI-TOF)	Gram-negative rods Report results  Growth  Report results  <i>A. baumannii</i>	Gram-negative rods Circular, convex, entire, smooth and cream (Figure 1) Growth  Motile  <i>A. baumannii</i> (99.9%)
<b>Antibiotic Susceptibility Profile<sup>2,3</sup></b> Amikacin Ampicillin/sulbactam Cefepime Ceftriaxone Ceftazidime Ciprofloxacin Colistin Gentamicin Imipenem Levofloxacin Meropenem Trimethoprim/sulfamethoxazole Tobramycin Tetracycline	Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Resistant Sensitive Sensitive	Sensitive (8 µg/mL) Sensitive (1.5 µg/mL) Sensitive (2 µg/mL) Intermediate (12 µg/mL) <sup>4</sup> Sensitive (4 µg/mL) Sensitive (≤ 0.25 µg/mL) Sensitive (≤ 0.25 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Resistant (4 µg/mL) Sensitive (≤ 1 µg/mL) Intermediate (8 µg/mL) <sup>4</sup>
<b>Genotypic Analysis</b> Sequencing of 16S ribosomal RNA gene (~ 1470 base pairs)	≥ 99% sequence identity to <i>A. baumannii</i> , strain MRSN 7446 (GenBank: VHEB01000054.1)	99.8% sequence identity to <i>A. baumannii</i> , strain MRSN 7446 (GenBank: VHEB01000054.1)
<b>Purity</b> 8 days at 37°C in an aerobic atmosphere with and without 5% CO <sub>2</sub> on Tryptic Soy agar	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology

TEST	SPECIFICATIONS	RESULTS
Viability	Growth	Growth

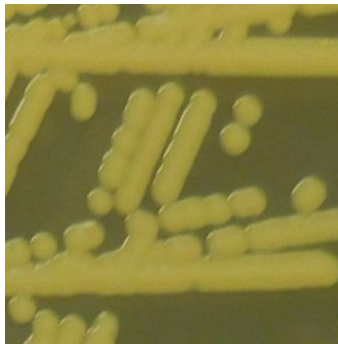
<sup>1</sup>Growth at 44°C differentiates *A. baumannii* from *A. calcoaceticus* and *A. pittii*, which do not grow at 44°C.

<sup>2</sup>Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S28 (2018)

<sup>3</sup>Antibiotic susceptibility was tested using a combination of VITEK2 GN82, Sensititre GNX2F AST and E-test strips.

<sup>4</sup>The susceptibility result for this antibiotic is within one doubling dilution of specification, which is considered an equivalent result.

Figure 1: Colony Morphology



/Heather Couch/  
Heather Couch

27 DEC 2021

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**Acinetobacter baumannii, Strain MRSN 7460**

**Catalog No. NR-52178**

This reagent is the tangible property of the U.S. Government.

**Product Description:**

*Acinetobacter baumannii* (*A. baumannii*), strain MRSN 7460 was isolated in 2005 from a wound in the United States as part of a global surveillance program. *A. baumannii*, strain MRSN 7460 was deposited as sensitive to amikacin, ceftazidime, ciprofloxacin, colistin, cefepime, imipenem, levofloxacin, meropenem, tobramycin and ampicillin/sulbactam and resistant to trimethoprim/sulfamethoxazole and tetracycline, with intermediate resistance to gentamicin and ceftriaxone. NR-52178 lot 70040790 was produced by inoculation of the deposited material into Tryptic Soy broth and grown for 1 day at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar kolles, which were grown for 1 day at 37°C in an aerobic atmosphere to produce this lot. Quality control testing was completed under propagation conditions unless otherwise noted.

**Lot: 70040790**

**Manufacturing Date: 11DEC2020**

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TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis</b> Cellular morphology Colony morphology  Growth at 44°C ± 2°C <sup>1</sup> 1 day in an aerobic atmosphere on Tryptic Soy agar Motility Remel™ Motility Test Medium w/TTC Indicator for 1 day at 37°C in an aerobic atmosphere VITEK® MS (MALDI-TOF)	Gram-negative rods Report results  Growth  Report results  <i>A. baumannii</i>	Gram-negative rods Circular, convex, entire, smooth and cream (Figure 1) Growth  Non-motile  <i>A. baumannii</i> (99.9%)
<b>Antibiotic Susceptibility Profile<sup>2,3</sup></b> Amikacin Ampicillin/sulbactam Cefepime Ceftriaxone Ceftazidime Ciprofloxacin Colistin Gentamicin Imipenem Levofloxacin Meropenem Trimethoprim/sulfamethoxazole Tobramycin Tetracycline	Sensitive Sensitive Sensitive Intermediate Sensitive Sensitive Sensitive Sensitive Intermediate Sensitive Sensitive Sensitive Sensitive Resistant Sensitive Resistant	Sensitive (4 µg/mL) Sensitive (1 µg/mL) Sensitive (2 µg/mL) Resistant (≥ 16 µg/mL) <sup>4</sup> Sensitive (4 µg/mL) Sensitive (≤ 0.25 µg/mL) Sensitive (0.25 µg/mL) Intermediate (4 µg/mL) Sensitive (1 µg/mL) Sensitive (1 µg/mL) Sensitive (1 µg/mL) Resistant (≥ 4 µg/mL) Sensitive (≤ 1 µg/mL) Resistant (≥ 256 µg/mL)
<b>Genotypic Analysis</b> Sequencing of 16S ribosomal RNA gene (~ 1340 base pairs)	≥ 99% sequence identity to <i>A. baumannii</i> , strain MRSN 7460 (GenBank: VHEA01000103.1)	99.9% sequence identity to <i>A. baumannii</i> , strain MRSN 7460 (GenBank: VHEA01000103.1)
<b>Purity</b> 7 days at 37°C in an aerobic atmosphere with and without 5% CO <sub>2</sub> on Tryptic Soy agar	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology

TEST	SPECIFICATIONS	RESULTS
Viability	Growth	Growth

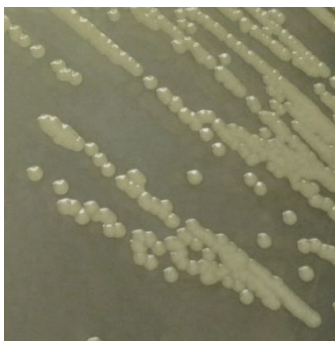
<sup>1</sup>Growth at 44°C differentiates *A. baumannii* from *A. calcoaceticus* and *A. pittii*, which do not grow at 44°C.

<sup>2</sup>Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S28 (2018)

<sup>3</sup>Antibiotic susceptibility was tested using a combination of VITEK2 GN82, Sensititre GNX2F AST and E-test strips.

<sup>4</sup>*A. baumannii*, strain MRSN 7460 was deposited as intermediate to ceftriaxone, but showed a MIC of  $\geq 16$  µg/mL (interpreted as resistant) for ceftriaxone during QC testing. Testing was performed in duplicate.

Figure 1: Colony Morphology



/Heather Couch/  
Heather Couch

10 MAY 2021

Program Manager or designee, ATCC Federal Solutions

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**Acinetobacter baumannii, Strain MRSN 7521**

**Catalog No. NR-52179**

This reagent is the tangible property of the U.S. Government.

**Product Description:**

*Acinetobacter baumannii* (*A. baumannii*), strain MRSN 7521 was isolated in 2005 from a urine specimen in the USA as part of a global surveillance program. NR-52179 was deposited as sensitive to colistin and ampicillin/sulbactam, resistant to amikacin, ceftazidime, ciprofloxacin, ceftriaxone, gentamicin, imipenem, levofloxacin, meropenem, trimethoprim/sulfamethoxazole, tobramycin and tetracycline, and intermediately resistant to cefepime. NR-52179 lot 70038536 was produced by inoculation of the deposited material into Tryptic Soy broth and grown for 1 day at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar kolles, which were grown for 1 day at 37°C in an aerobic atmosphere to produce this lot. Quality control testing was completed under propagation conditions unless otherwise noted.

**Lot: 70038536**

**Manufacturing Date: 27AUG2020**

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TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis</b> Cellular morphology Colony morphology  Growth at 44°C ± 2°C <sup>1</sup> 1 day in an aerobic atmosphere on Tryptic Soy agar  Motility Remel™ Motility Test Medium w/TTC Indicator for 1 day at 37°C in an aerobic atmosphere  VITEK® MS (MALDI-TOF)	Gram-negative rods Report results  Growth  Report results  <i>A. baumannii</i>	Gram-negative rods Circular, convex, entire, smooth and cream (Figure 1) Growth  Motile  <i>A. baumannii</i> (99.9%)
<b>Antibiotic Susceptibility Profile<sup>2,3</sup></b> Amikacin Ampicillin/sulbactam Cefepime Ceftriaxone Ceftazidime Ciprofloxacin Colistin Gentamicin Imipenem Levofloxacin Meropenem Trimethoprim/sulfamethoxazole Tobramycin Tetracycline	Resistant Sensitive Intermediate Resistant Resistant Resistant Resistant Sensitive Resistant Resistant Resistant Resistant Resistant Resistant Resistant Resistant Resistant Resistant	Resistant (96 µg/mL) Sensitive (6 µg/mL) Intermediate (24 µg/mL) Resistant (32 µg/mL) Resistant (> 16 µg/mL) Resistant (> 2 µg/mL) Sensitive (≤ 0.25 µg/mL) Resistant (> 8 µg/mL) Resistant (> 8 µg/mL) Resistant (> 8 µg/mL) Resistant (> 8 µg/mL) Resistant (> 8 µg/mL) Resistant (> 4 µg/mL) Resistant (> 8 µg/mL) Resistant (256 µg/mL)
<b>Genotypic Analysis</b> Sequencing of 16S ribosomal RNA gene (~ 1470 base pairs)	≥ 99% sequence identity to <i>A. baumannii</i> , strain MRSN 7521 (GenBank: VHDZ01000101.1)	99.9% sequence identity to <i>A. baumannii</i> , strain MRSN 7521 (GenBank: VHDZ01000101.1)



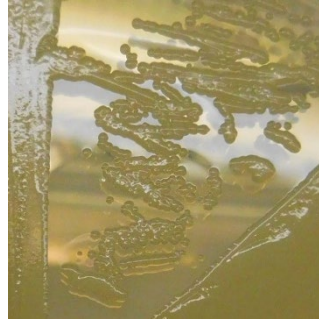
TEST	SPECIFICATIONS	RESULTS
<b>Purity</b> 7 days at 37°C in an aerobic atmosphere with and without 5% CO <sub>2</sub> on Tryptic Soy agar	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology
<b>Viability</b>	Growth	Growth

<sup>1</sup>Growth at 44°C differentiates *A. baumannii* from *A. calcoaceticus* and *A. pittii*, which do not grow at 44°C.

<sup>2</sup>Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S28 (2018)

<sup>3</sup>Antibiotic susceptibility was tested using a combination of Sensititre™ GNX2F AST and E-test strips.

Figure 1: Colony Morphology



/Heather Couch/  
Heather Couch

09 NOV 2021

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**Acinetobacter baumannii, Strain MRSN 7576**

**Catalog No. NR-52180**

This reagent is the tangible property of the U.S. Government.

**Product Description:**

*Acinetobacter baumannii* (*A. baumannii*), strain MRSN 7576 was isolated in 2005 from a human wound sample in the United States as part of a global surveillance program. *A. baumannii*, strain MRSN 7576 was deposited as sensitive to amikacin, ampicillin/sulbactam, cefepime, ceftazidime, ceftriaxone, ciprofloxacin, colistin, gentamicin, imipenem, levofloxacin, meropenem, tetracycline, tobramycin and trimethoprim/sulfamethoxazole. NR-52180 lot 70041737 was produced by inoculation of the deposited material into Tryptic Soy broth and grown for 1 day at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar kolles, which were grown for 1 day at 37°C in an aerobic atmosphere to produce this lot. Quality control testing was completed under propagation conditions unless otherwise noted.

**Lot: 70041737**

**Manufacturing Date: 05FEB2021**

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TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis</b> Cellular morphology Colony morphology  Growth at 44°C ± 2°C <sup>1</sup> 1 day in an aerobic atmosphere on Tryptic Soy agar Motility Remel™ Motility Test Medium w/TTC Indicator for 1 day at 37°C in an aerobic atmosphere VITEK® MS (MALDI-TOF)	Gram-negative rods Report results  Growth  Report results  <i>A. baumannii</i>	Gram-negative rods Circular, convex, entire, smooth and cream (Figure 1) Growth  Motile  <i>A. baumannii</i> (99.9%)
<b>Antibiotic Susceptibility Profile<sup>2,3</sup></b> Amikacin Ampicillin/sulbactam Cefepime Ceftriaxone Ceftazidime Ciprofloxacin Colistin Gentamicin Imipenem Levofloxacin Meropenem Trimethoprim/sulfamethoxazole Tobramycin Tetracycline	Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive	Sensitive (6 µg/mL) Sensitive (1.5 µg/mL) Sensitive (1.5 to 2 µg/mL) Sensitive (8 µg/mL) Sensitive (4 µg/mL) Sensitive (≤ 0.25 µg/mL) Sensitive (≤ 0.25 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 0.5 µg/mL) Sensitive (≤ 1 µg/mL) Intermediate (6 µg/mL) <sup>4</sup>
<b>Genotypic Analysis</b> Sequencing of 16S ribosomal RNA gene (~1470 base pairs)	≥ 99% sequence identity to <i>A. baumannii</i> , strain MRSN 7576 (GenBank: VHDY01000049.1)	100% sequence identity to <i>A. baumannii</i> , strain MRSN 7576 (GenBank: VHDY01000049.1)
<b>Purity</b> 7 days at 37°C in an aerobic atmosphere with and without 5% CO <sub>2</sub> on Tryptic Soy agar	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology

TEST	SPECIFICATIONS	RESULTS
Viability	Growth	Growth

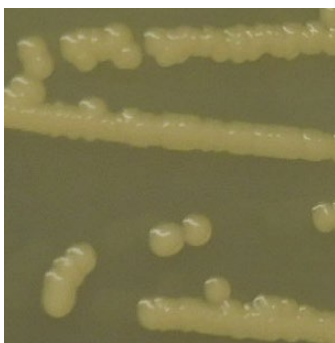
<sup>1</sup>Growth at 44°C differentiates *A. baumannii* from *A. calcoaceticus* and *A. pittii*, which do not grow at 44°C.

<sup>2</sup>Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S28 (2018)

<sup>3</sup>Antibiotic susceptibility was tested using a combination of VITEK<sup>®</sup>2 GN82, Sensititre GNX2F AST and E-test strips.

<sup>4</sup>The susceptibility result for this antibiotic is within one doubling dilution of specification, which is considered an equivalent result.

Figure 1: Colony Morphology



/Heather Couch/  
Heather Couch

04 FEB 2022

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**Acinetobacter baumannii, Strain MRSN 7690**

**Catalog No. NR-52181**

This reagent is the tangible property of the U.S. Government.

**Product Description:**

*Acinetobacter baumannii* (*A. baumannii*), strain MRSN 7690 was isolated in 2006 from a human wound sample in the United States as part of a global surveillance program. *A. baumannii*, strain MRSN 7690 was deposited as sensitive to amikacin, colistin, imipenem, levofloxacin, meropenem and tetracycline and resistant to ampicillin/sulbactam, cefepime, ceftazidime, ceftriaxone, ciprofloxacin, gentamicin, trimethoprim/sulfamethoxazole and tobramycin. NR-52181 lot 70040792 was produced by inoculation of the deposited material into Tryptic Soy broth and grown for 1 day at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar kolles, which were grown for 1 day at 37°C in an aerobic atmosphere to produce this lot. Quality control testing was completed under propagation conditions unless otherwise noted.

**Lot: 70040792**

**Manufacturing Date: 09DEC2020**

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TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis</b> Cellular morphology Colony morphology  Growth at 44°C ± 2°C <sup>1</sup> 1 day in an aerobic atmosphere on Tryptic Soy agar Motility Remel™ Motility Test Medium w/TTC Indicator for 1 day at 37°C in an aerobic atmosphere VITEK® MS (MALDI-TOF)	Gram-negative rods Report results  Growth  Report results  <i>A. baumannii</i>	Gram-negative rods Circular, convex, entire, smooth and cream Growth  Motile  <i>A. baumannii</i> (99.9%)
<b>Antibiotic Susceptibility Profile<sup>2,3</sup></b> Amikacin Ampicillin/sulbactam Cefepime Ceftriaxone Ceftazidime Ciprofloxacin Colistin Gentamicin Imipenem Levofloxacin Meropenem Trimethoprim/sulfamethoxazole Tobramycin Tetracycline	Sensitive Resistant Resistant Resistant Resistant Resistant Sensitive Resistant Sensitive Sensitive Sensitive Sensitive Resistant Resistant Sensitive	Sensitive (16 µg/mL) Sensitive (4 to 6 µg/mL) <sup>4</sup> Resistant (> 256 µg/mL) Resistant (> 32 µg/mL) Resistant (≥ 64 µg/mL) Intermediate (2 to 3 µg/mL) <sup>5</sup> Sensitive (0.5 µg/mL) Resistant (64 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Resistant (> 4 µg/mL) Resistant (32 µg/mL) Intermediate (4 to 6 µg/mL) <sup>5</sup>
<b>Genotypic Analysis</b> Sequencing of 16S ribosomal RNA gene (~ 1390 base pairs)	≥ 99% sequence identity to <i>A. baumannii</i> , strain MRSN 7690 (GenBank: VHDX0100080.1)	99.9% sequence identity to <i>A. baumannii</i> , strain MRSN 7690 (GenBank: VHDX0100080.1)

TEST	SPECIFICATIONS	RESULTS
<b>Purity</b> 7 days at 37°C in an aerobic atmosphere with and without 5% CO <sub>2</sub> on Tryptic Soy agar	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology
<b>Viability</b>	Growth	Growth

<sup>1</sup>Growth at 44°C differentiates *A. baumannii* from *A. calcoaceticus* and *A. pittii*, which do not grow at 44°C.

<sup>2</sup>Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S28 (2018)

<sup>3</sup>Antibiotic susceptibility was tested using a combination of VITEK<sup>®</sup>2 GN82, Sensititre GNX2F AST and E-test strips.

<sup>4</sup>*A. baumannii*, strain MRSN 7690 was deposited as resistant to ampicillin/sulbactam, but showed a MIC of 4 to 6 µg per mL (interpreted as sensitive) for this antibiotic during QC testing. Testing was performed in duplicate.

<sup>5</sup>The susceptibility result for this antibiotic is within one doubling dilution of specification, which is considered an equivalent result.

/Heather Couch/

Heather Couch

05 FEB 2022

Program Manager or designee, ATCC Federal Solutions

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***Acinetobacter baumannii*, Strain MRSN 7725**

**Catalog No. NR-52182**

This reagent is the tangible property of the U.S. Government.

**Product Description:**

*Acinetobacter baumannii* (*A. baumannii*), strain MRSN 7725 was isolated in 2006 from a human wound sample in the United States as part of a global surveillance program. NR-52182 was deposited as multi-locus sequence type (MLST) ST 412, resistant to trimethoprim/sulfamethoxazole, sensitive to amikacin, cefepime, ceftazidime, ceftriaxone, ciprofloxacin, colistin, gentamicin, imipenem, levofloxacin, meropenem, tetracycline and tobramycin and intermediately resistant to ampicillin/sulbactam. NR-52182 was produced by inoculation of the deposited material into Tryptic Soy broth and grown for 1 day at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar kolles, which were grown for 1 day at 37°C in an aerobic atmosphere to produce this lot. Quality control testing was completed under propagation conditions unless otherwise noted.

**Lot: 70041739**

**Manufacturing Date: 05FEB2021**

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TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis</b> Cellular morphology Colony morphology  Growth at 44°C ± 2°C <sup>1</sup> 1 day in an aerobic atmosphere on Tryptic Soy agar  Motility BBL™ Motility Test Medium w/TTC Indicator for 1 day at 35°C in an aerobic atmosphere VITEK® MS (MALDI-TOF)	Gram-negative rods Report results  Growth  Report results  <i>A. baumannii</i>	Gram-negative rods Circular, convex, entire, smooth and cream (Figure 1) Growth  Motile  <i>A. baumannii</i> (99.9%)
<b>Antibiotic Susceptibility Profile<sup>2,3</sup></b> Amikacin Ampicillin/sulbactam Cefepime Ceftriaxone Ceftazidime Ciprofloxacin Colistin Gentamicin Imipenem Levofloxacin Meropenem Trimethoprim/sulfamethoxazole Tobramycin Tetracycline	Sensitive Intermediate Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Resistant Sensitive Sensitive	Sensitive (4 µg/mL) Sensitive (3 to 4 µg/mL) <sup>4</sup> Sensitive (1.5 µg/mL) Intermediate (16 µg/mL) <sup>5</sup> Sensitive (4 µg/mL) Sensitive (1 µg/mL) Sensitive (≤ 0.25 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Resistant (> 4 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (1 µg/mL)
<b>Genotypic Analysis</b> Sequencing of 16S ribosomal RNA gene (~ 1470 base pairs)	≥ 99% sequence identity to <i>A. baumannii</i> , strain MRSN 7725 (GenBank: VHDW01000073.1)	99.9% sequence identity to <i>A. baumannii</i> , strain MRSN 7725 (GenBank: VHDW01000073.1)
<b>Purity</b> 7 days at 37°C in an aerobic atmosphere with and without 5% CO <sub>2</sub> on Tryptic Soy agar	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology

TEST	SPECIFICATIONS	RESULTS
Viability	Growth	Growth

<sup>1</sup>Growth at 44°C differentiates *A. baumannii* from *A. calcoaceticus* and *A. pittii*, which do not grow at 44°C.

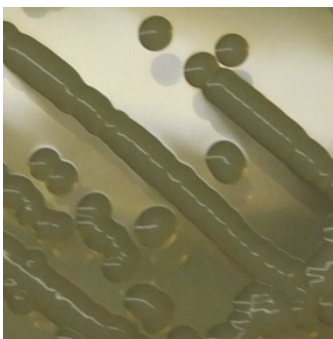
<sup>2</sup>Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S28 (2018)

<sup>3</sup>Antibiotic susceptibility was tested using a combination of VITEK<sup>®</sup>2 GN82, Sensititre GNX2F AST and E-test strips.

<sup>4</sup>*A. baumannii*, strain MRSN 7725 was deposited as intermediately resistant to ampicillin/sulbactam but showed a MIC of 3 to 4 µg per mL (interpreted as sensitive) for ampicillin/sulbactam during QC testing. Testing was performed in quadruplicate.

<sup>5</sup>The susceptibility result for this antibiotic is within one doubling dilution of specification, which is considered an equivalent result.

Figure 1: Colony Morphology



/Heather Couch/  
Heather Couch

31 AUG 2021

Program Manager or designee, ATCC Federal Solutions

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**Acinetobacter baumannii, Strain MRSN 7735**

**Catalog No. NR-52183**

This reagent is the tangible property of the U.S. Government.

**Product Description:**

*Acinetobacter baumannii* (*A. baumannii*), strain MRSN 7735 was isolated in 2006 from a human wound sample in the United States as part of a global surveillance program. NR-52183 was deposited as sensitive to amikacin, cefepime, ceftazidime, ceftriaxone, ciprofloxacin, colistin, gentamicin, imipenem, levofloxacin, meropenem, tobramycin, tetracycline, ampicillin/sulbactam and trimethoprim/sulfamethoxazole. NR-52183 lot 70042453 was produced by inoculation of the deposited material into Tryptic Soy broth and grown for 1 day at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar kolles, which were grown for 1 day at 37°C in an aerobic atmosphere to produce this lot. Quality control testing was completed under propagation conditions unless otherwise noted.

**Lot: 70042453**

**Manufacturing Date: 24FEB2020**

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TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis</b> Cellular morphology Colony morphology  Growth at 44°C ± 2°C <sup>1</sup> 1 day in an aerobic atmosphere on Tryptic Soy agar Motility Remel™ Motility Test Medium w/TTC Indicator for 1 day at 37°C in an aerobic atmosphere VITEK® MS (MALDI-TOF)	Gram-negative rods Report results  Growth  Report results  <i>A. baumannii</i>	Gram-negative rods Circular, convex, entire, smooth and cream (Figure 1) Growth  Motile  <i>A. baumannii</i> (99.9%)
<b>Antibiotic Susceptibility Profile<sup>2,3</sup></b> Amikacin Ampicillin/sulbactam Cefepime Ceftriaxone Ceftazidime Ciprofloxacin Colistin Gentamicin Imipenem Levofloxacin Meropenem Trimethoprim/sulfamethoxazole Tobramycin Tetracycline	Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive	Sensitive (4 µg/mL) Sensitive (1 to 1.5 µg/mL) Sensitive (1.5 to 2 µg/mL) Sensitive (8 µg/mL) Sensitive (4 µg/mL) Sensitive (≤ 0.25 µg/mL) Sensitive (≤ 0.25 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Inconclusive <sup>4</sup> Sensitive (≤ 1 µg/mL) Sensitive (≤ 0.5 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (4 µg/mL)
<b>Genotypic Analysis</b> Sequencing of 16S ribosomal RNA gene (~ 1470 base pairs)	≥ 99% sequence identity to <i>A. baumannii</i> , strain MRSN 7735 (GenBank: VHDV01000051.1)	99.9% sequence identity to <i>A. baumannii</i> , strain MRSN 7735 (GenBank: VHDV01000051.1)
<b>Purity</b> 7 days at 37°C in an aerobic atmosphere with and without 5% CO <sub>2</sub> on Tryptic Soy agar	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology



TEST	SPECIFICATIONS	RESULTS
Viability	Growth	Growth

<sup>1</sup>Growth at 44°C differentiates *A. baumannii* from *A. calcoaceticus* and *A. pittii*, which do not grow at 44°C.

<sup>2</sup>Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S28 (2018)

<sup>3</sup>Antibiotic susceptibility was tested using a combination of VITEK<sup>®</sup>2 GN82, Sensititre GNX2F AST and E-test strips.

<sup>4</sup>*A. baumannii*, strain MRSN 7735 was deposited as being resistant to levofloxacin. Repeated antibiotic susceptibility testing determined that for strain MRSN 7735, the levofloxacin MICs are  $\geq 8 \mu\text{g/mL}$  and  $\leq 1 \mu\text{g/mL}$ , which are interpreted as resistant and sensitive, respectively.

Figure 1: Colony Morphology



/Heather Couch/  
Heather Couch

10 JAN 2022

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**Acinetobacter baumannii, Strain MRSN 10372**

**Catalog No. NR-52184**

This reagent is the tangible property of the U.S. Government.

**Product Description:**

*Acinetobacter baumannii* (*A. baumannii*), strain MRSN 10372 was isolated in 2007 from a human urine sample in the United States as part of a global surveillance program. *A. baumannii*, strain MRSN 10372 was deposited as sensitive to amikacin, ampicillin/sulbactam, cefepime, ceftazidime, ciprofloxacin, colistin, imipenem, levofloxacin, meropenem, tetracycline, tobramycin and trimethoprim/sulfamethoxazole and intermediately resistant to gentamicin and ceftriaxone. NR-52184 lot 70042455 was produced by inoculation of the deposited material into Tryptic Soy broth and grown for 1 day at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar kolles, which were grown for 1 day at 37°C in an aerobic atmosphere to produce this lot. Quality control testing was completed under propagation conditions unless otherwise noted.

**Lot: 70042455**

**Manufacturing Date: 24FEB2021**

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TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis</b> Cellular morphology Colony morphology  Growth at 44°C ± 2°C <sup>1</sup> 1 day in an aerobic atmosphere on Tryptic Soy agar  Motility Remel™ Motility Test Medium w/TTC Indicator for 1 day at 37°C in an aerobic atmosphere  VITEK® MS (MALDI-TOF)	Gram-negative rods Report results  Growth  Report results  <i>A. baumannii</i>	Gram-negative rods Circular, convex, entire, smooth and cream (Figure 1) Growth  Motile  <i>A. baumannii</i> (99.9%)
<b>Antibiotic Susceptibility Profile<sup>2,3</sup></b> Amikacin Ampicillin/sulbactam Cefepime Ceftriaxone Ceftazidime Ciprofloxacin Colistin Gentamicin Imipenem Levofloxacin Meropenem Trimethoprim/sulfamethoxazole Tobramycin Tetracycline	Sensitive Sensitive Sensitive Intermediate Sensitive Sensitive Sensitive Sensitive Intermediate Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive	Sensitive (8 µg/mL) Sensitive (1.5 µg/mL) Sensitive (2 µg/mL) Intermediate (16 µg/mL) Sensitive (4 µg/mL) Sensitive (≤ 0.25 µg/mL) Sensitive (≤ 0.25 µg/mL) Sensitive (2 µg/mL) <sup>4</sup> Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 0.5 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (2 to 4 µg/mL)
<b>Genotypic Analysis</b> Sequencing of 16S ribosomal RNA gene (~ 1470 base pairs)	≥ 99% sequence identity to <i>A. baumannii</i> , strain MRSN 10372 (GenBank: VHHM01000032.1)	100% sequence identity to <i>A. baumannii</i> , strain MRSN 10372 (GenBank: VHHM01000032.1)

TEST	SPECIFICATIONS	RESULTS
<b>Purity</b> 7 days at 37°C in an aerobic atmosphere with and without 5% CO <sub>2</sub> on Tryptic Soy agar	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology
<b>Viability</b>	Growth	Growth

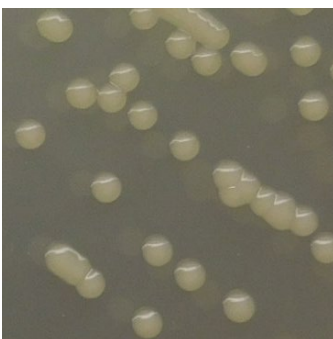
<sup>1</sup>Growth at 44°C differentiates *A. baumannii* from *A. calcoaceticus* and *A. pittii*, which do not grow at 44°C.

<sup>2</sup>Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S28 (2018)

<sup>3</sup>Antibiotic susceptibility was tested using a combination of VITEK<sup>®</sup>2 GN82, Sensititre GNX2F AST and E-test strips.

<sup>4</sup>*A. baumannii*, strain MRSN 10372 was deposited as being intermediately resistant to gentamicin. Repeated antibiotic susceptibility testing determined that for strain MRSN 10372 the gentamicin MIC is 2 µg/mL, which is interpreted as sensitive. Testing was performed in duplicate.

**Figure 1: Colony Morphology**



/Heather Couch/

Heather Couch

11 JAN 2022

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**Acinetobacter baumannii, Strain MRSN 11224**

**Catalog No. NR-52185**

This reagent is the tangible property of the U.S. Government.

**Product Description:**

*Acinetobacter baumannii* (*A. baumannii*), strain MRSN 11224 was isolated in 2012 from a human wound in the United States as part of a global surveillance program. *A. baumannii*, strain MRSN 11224 was deposited as sensitive to colistin and resistant to amikacin, ceftazidime, ciprofloxacin, ceftriaxone, cefepime, gentamicin, imipenem, trimethoprim/sulfamethoxazole, levofloxacin, meropenem, tobramycin, tetracycline and ampicillin/sulbactam. NR-52185 lot 70038538 was produced by inoculation of the deposited material into Tryptic Soy broth and grown for 1 day at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar kolles, which were grown for 1 day at 37°C in an aerobic atmosphere to produce this lot. Quality control testing was completed under propagation conditions unless otherwise noted.

**Lot: 70038538**

**Manufacturing Date: 28AUG2020**

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TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis</b> Cellular morphology Colony morphology  Growth at 44°C ± 2°C <sup>1</sup> 1 day in an aerobic atmosphere on Tryptic Soy agar  Motility Remel™ Motility Test Medium w/TTC Indicator for 1 day at 37°C in an aerobic atmosphere  VITEK® MS (MALDI-TOF)	Gram-negative rods Report results  Growth  Report results  <i>A. baumannii</i>	Gram-negative rods Circular, convex, entire, smooth and cream (Figure 1) Growth  Non-motile  <i>A. baumannii</i> (99.9%)
<b>Antibiotic Susceptibility Profile<sup>2,3</sup></b> Amikacin Ampicillin/sulbactam Cefepime Ceftriaxone Ceftazidime Ciprofloxacin Colistin Gentamicin Imipenem Levofloxacin Meropenem Trimethoprim/sulfamethoxazole Tobramycin Tetracycline	Resistant Resistant Resistant Resistant Resistant Resistant Sensitive Resistant Resistant Resistant Resistant Resistant Resistant Resistant Resistant	Resistant (64 µg/mL) Resistant (48 µg/mL) Resistant (> 256 µg/mL) Resistant (≥ 64 µg/mL) Resistant (≥ 64 µg/mL) Resistant (≥ 4 µg/mL) Sensitive (≤ 0.25 µg/mL) Resistant (≥ 16 µg/mL) Resistant (> 8 µg/mL) Resistant (≥ 8 µg/mL) Resistant (≥ 8 µg/mL) Resistant (> 4 µg/mL) Resistant (24 µg/mL) Resistant (> 256 µg/mL)
<b>Genotypic Analysis</b> Sequencing of 16S ribosomal RNA gene (~ 1400 base pairs)	≥ 99% sequence identity to <i>A. baumannii</i> , strain MRSN 11224 (GenBank: VHHLO1000097.1)	99.8% sequence identity to <i>A. baumannii</i> , strain MRSN 11224 (GenBank: VHHLO1000097.1)
<b>Purity</b> 7 days at 37°C in an aerobic atmosphere with and without 5% CO <sub>2</sub> on Tryptic Soy agar	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology

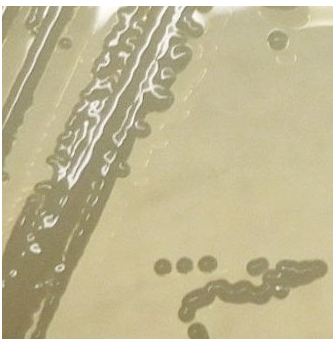
TEST	SPECIFICATIONS	RESULTS
Viability	Growth	Growth

<sup>1</sup>Growth at 44°C differentiates *A. baumannii* from *A. calcoaceticus* and *A. pittii*, which do not grow at 44°C.

<sup>2</sup>Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S28 (2018)

<sup>3</sup>Antibiotic susceptibility was tested using a combination of VITEK<sup>®</sup>2 GN82, Sensititre<sup>™</sup> GNX2F AST and E-test strips.

Figure 1: Colony Morphology



/Heather Couch/  
Heather Couch

28 APR 2021

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**Acinetobacter baumannii, Strain MRSN 11663**

**Catalog No. NR-52186**

This reagent is the tangible property of the U.S. Government.

**Product Description:**

*Acinetobacter baumannii* (*A. baumannii*), strain MRSN 11663 was isolated in 2009 from a human tissue sample in the USA as part of a global surveillance program. *A. baumannii*, strain MRSN 11663 was deposited as sensitive to colistin, intermediately resistant to ampicillin/sulbactam, and resistant to amikacin, ceftazidime, ciprofloxacin, ceftriaxone, cefepime, gentamicin, imipenem, trimethoprim/sulfamethoxazole, levofloxacin, meropenem, tobramycin and tetracycline. NR-52186 lot 70038539 was produced by inoculation of the deposited material into Tryptic Soy broth and grown for 1 day at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar kolles, which were grown for 1 day at 37°C in an aerobic atmosphere to produce this lot. Quality control testing was completed under propagation conditions unless otherwise noted.

**Lot: 70038539**

**Manufacturing Date: 28AUG2020**

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TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis</b> Cellular morphology Colony morphology  Growth at 44°C ± 2°C <sup>1</sup> 1 day in an aerobic atmosphere on Tryptic Soy agar  Motility BBL™ Motility Test Medium w/TTC Indicator for 1 day at 37°C in an aerobic atmosphere  VITEK® MS (MALDI-TOF) VITEK® 2 GN card	Gram-negative rods Report results  Growth  Report results  <i>A. baumannii</i> <i>A. baumannii</i> (≥ 89%)	Gram-negative rods Circular, raised, entire, smooth and cream (Figure 1) Growth  Motile  <i>A. baumannii</i> (99.9%) <i>A. baumannii</i> (99%)
<b>Antibiotic Susceptibility Profile<sup>2,3</sup></b> Amikacin Ampicillin/sulbactam Cefepime Ceftriaxone Ceftazidime Ciprofloxacin Colistin Gentamicin Imipenem Levofloxacin Meropenem Trimethoprim/sulfamethoxazole Tobramycin Tetracycline	Resistant Intermediate Resistant Resistant Resistant Resistant Resistant Sensitive Resistant Resistant Resistant Resistant Resistant Resistant Resistant Resistant Resistant	Resistant (> 256 µg/mL) Intermediate (8 to 12 µg/mL) Resistant (> 256 µg/mL) Resistant (≥ 64 µg/mL) Resistant (≥ 64 µg/mL) Resistant (≥ 4 µg/mL) Sensitive (≤ 0.25 µg/mL) Resistant (≥ 16 µg/mL) Resistant (≥ 8 µg/mL) Intermediate (4 µg/mL) <sup>4</sup> Resistant (> 8 µg/mL) Resistant (4 µg/mL) Resistant (≥ 16 µg/mL) Resistant (256 µg/mL)
<b>Genotypic Analysis</b> Sequencing of 16S ribosomal RNA gene (~ 1490 base pairs)	≥ 99% sequence identity to <i>A. baumannii</i> , strain MRSN 11663 (GenBank: VHHK01000038.1)	99.8% sequence identity to <i>A. baumannii</i> , strain MRSN 11663 (GenBank: VHHK01000038.1)

TEST	SPECIFICATIONS	RESULTS
<b>Purity</b> 8 days at 37°C in an aerobic atmosphere with and without 5% CO <sub>2</sub> on Tryptic Soy agar	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology
<b>Viability</b>	Growth	Growth

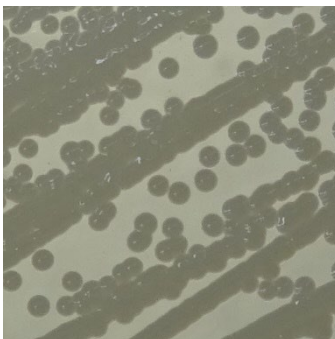
<sup>1</sup>Growth at 44°C differentiates *A. baumannii* from *A. calcoaceticus* and *A. pittii*, which do not grow at 44°C.

<sup>2</sup>Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S28 (2018)

<sup>3</sup>Antibiotic susceptibility was tested using a combination of VITEK<sup>®</sup>2 GN82, Sensititre GNX2F AST and E-test strips.

<sup>4</sup>The susceptibility result for this antibiotic is within one doubling dilution of specification, which is considered an equivalent result.

Figure 1: Colony Morphology



/Heather Couch/

Heather Couch

Program Manager or designee, ATCC Federal Solutions

19 MAY 2021

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**Acinetobacter baumannii, Strain MRSN 11669**

**Catalog No. NR-52187**

This reagent is the tangible property of the U.S. Government.

**Product Description:**

*Acinetobacter baumannii* (*A. baumannii*), strain MRSN 11669 was isolated in 2009 from a human urine sample in the United States as part of a global surveillance program. NR-52187 was deposited as multi-locus sequence type (MLST) ST 16, resistant to cefepime, ceftazidime, ciprofloxacin, gentamicin, levofloxacin and trimethoprim/sulfamethoxazole, sensitive to amikacin, colistin, imipenem, meropenem, tobramycin, ampicillin/sulbactam and tetracycline and intermediately resistant to ceftriaxone. NR-52187 was produced by inoculation of the deposited material into Tryptic Soy broth and grown for 1 day at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar kolles, which were grown for 1 day at 37°C in an aerobic atmosphere to produce this lot. Quality control testing was completed under propagation conditions unless otherwise noted.

**Lot: 70040794**

**Manufacturing Date: 09DEC2020**

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TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis</b> Cellular morphology Colony morphology  Growth at 44°C ± 2°C <sup>1</sup> 1 day in an aerobic atmosphere on Tryptic Soy agar  Motility BBL™ Motility Test Medium w/TTC Indicator for 1 day at 35°C in an aerobic atmosphere  VITEK® MS (MALDI-TOF)	Gram-negative rods Report results  Growth  Report results  <i>A. baumannii</i>	Gram-negative rods Circular, convex, entire, smooth and cream (Figure 1) Growth  Motile  <i>A. baumannii</i> (99.9%)
<b>Antibiotic Susceptibility Profile<sup>2,3</sup></b> Amikacin Ampicillin/sulbactam Cefepime Ceftriaxone Ceftazidime Ciprofloxacin Colistin Gentamicin Imipenem Levofloxacin Meropenem Trimethoprim/sulfamethoxazole Tobramycin Tetracycline	Sensitive Sensitive Resistant Intermediate Resistant Resistant Sensitive Resistant Sensitive Sensitive Resistant Sensitive Resistant Sensitive Sensitive	Sensitive (16 µg/mL) Sensitive (4 µg/mL) Intermediate (12 to 16 µg/mL) <sup>4</sup> Intermediate (32 µg/mL) Intermediate (16 µg/mL) <sup>4</sup> Resistant (≥ 4 µg/mL) Sensitive (≤ 0.25 µg/mL) Resistant (8 to 16 µg/mL) Sensitive (≤ 1 µg/mL) Resistant (4 µg/mL) Sensitive (≤ 1 µg/mL) Resistant (> 4 µg/mL) Sensitive (≤ 1 µg/mL) Resistant (16 to 24 µg/mL) <sup>5</sup>
<b>Genotypic Analysis</b> Sequencing of 16S ribosomal RNA gene (~ 1470 base pairs)	≥ 99% sequence identity to <i>A. baumannii</i> , strain MRSN 11669 (GenBank: VHHJ01000060.1)	100% sequence identity to <i>A. baumannii</i> , strain MRSN 11669 (GenBank: VHHJ01000060.1)
<b>Purity</b> 7 days at 37°C in an aerobic atmosphere with and without 5% CO <sub>2</sub> on Tryptic Soy agar	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology



TEST	SPECIFICATIONS	RESULTS
Viability	Growth	Growth

<sup>1</sup>Growth at 44°C differentiates *A. baumannii* from *A. calcoaceticus* and *A. pittii*, which do not grow at 44°C.

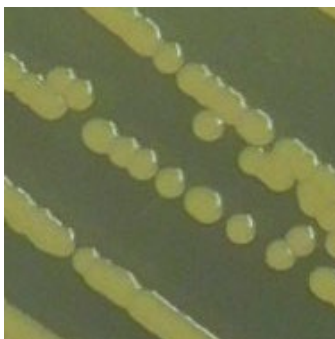
<sup>2</sup>Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S28 (2018)

<sup>3</sup>Antibiotic susceptibility was tested using a combination of VITEK<sup>®</sup>2 GN82, Sensititre GNX2F AST and E-test strips.

<sup>4</sup>The susceptibility result for this antibiotic is within one doubling dilution of specification, which is considered an equivalent result.

<sup>5</sup>*A. baumannii*, strain MRSN 11669 was deposited as sensitive to tetracycline but showed a MIC of 16 to 24 µg per mL (interpreted as resistant) for tetracycline during QC testing. Testing was performed in quadruplicate.

Figure 1: Colony Morphology



/Heather Couch/  
Heather Couch

31 AUG 2021

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**Acinetobacter baumannii, Strain MRSN 11695**

**Catalog No. NR-52188**

This reagent is the tangible property of the U.S. Government.

**Product Description:**

*Acinetobacter baumannii* (*A. baumannii*), strain MRSN 11695 was isolated in 2007 from a human urine sample in USA as part of a global surveillance program. *A. baumannii*, strain MRSN 11695 was deposited as sensitive to colistin, intermediately resistant to tetracycline, and resistant to amikacin, ceftazidime, ciprofloxacin, ceftriaxone, cefepime, gentamicin, imipenem, tobramycin, trimethoprim/sulfamethoxazole, levofloxacin, meropenem and ampicillin/sulbactam. NR-52188 lot 70039038 was produced by inoculation of the depositor material into Tryptic Soy broth and grown for 1 day at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar kolles, which were grown for 1 day at 37°C in an aerobic atmosphere to produce this lot. Quality control testing was completed under propagation conditions unless otherwise noted.

**Lot: 70039038**

**Manufacturing Date: 10SEP2020**

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TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis</b> Cellular morphology Colony morphology  Growth at 44°C ± 2°C <sup>1</sup> 1 day in an aerobic atmosphere on Tryptic Soy agar Motility Remel™ Motility Test Medium w/TTC Indicator for 1 day at 37°C in an aerobic atmosphere VITEK® MS (MALDI-TOF)	Gram-negative rods Report results  Growth  Report results  <i>A. baumannii</i>	Gram-negative rods Circular, convex, entire, smooth and cream (Figure 1) Growth  Non-motile  <i>A. baumannii</i> (99.9%)
<b>Antibiotic Susceptibility Profile<sup>2,3</sup></b> Amikacin Cefepime Ceftazidime Ciprofloxacin Colistin Gentamicin Imipenem Levofloxacin Meropenem Tobramycin Trimethoprim/sulfamethoxazole Ampicillin/sulbactam Ceftriaxone Tetracycline	Resistant Resistant Resistant Resistant Sensitive Resistant Resistant Resistant Resistant Resistant Resistant Resistant Resistant Resistant Resistant Intermediate	Resistant (> 256 µg/mL) Resistant (> 256 µg/mL) Resistant (≥ 64 µg/mL) Resistant (≥ 4 µg/mL) Sensitive (≤ 0.5 µg/mL) Resistant (≥ 16 µg/mL) Resistant (> 8 µg/mL) Resistant (≥ 8 µg/mL) Resistant (≥ 16 µg/mL) Resistant (≥ 16 µg/mL) Inconclusive (2 to 4 µg/mL) <sup>4</sup> Sensitive (4 to 6 µg/mL) <sup>5</sup> Resistant (≥ 64 µg/mL) Resistant (≥ 256 µg/mL) <sup>6</sup>
<b>Genotypic Analysis</b> Sequencing of 16S ribosomal RNA gene (1480 base pairs)	≥ 99% sequence identity to <i>A. baumannii</i> , strain MRSN 11695 (GenBank: VHHI01000080.1)	100% sequence identity to <i>A. baumannii</i> , strain MRSN 11695 (GenBank: VHHI01000080.1)
<b>Purity</b> 7 days at 37°C in an aerobic atmosphere with and without 5% CO <sub>2</sub> on Tryptic Soy agar	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology

TEST	SPECIFICATIONS	RESULTS
Viability	Growth	Growth

<sup>1</sup>Growth at 44°C differentiates *A. baumannii* from *A. calcoaceticus* and *A. pittii*, which do not grow at 44°C.

<sup>2</sup>Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S28 (2018)

<sup>3</sup>Antibiotic susceptibility was tested using a combination of VITEK<sup>®</sup>2 GN82, Sensititre GNX3F AST and E-test strips.

<sup>4</sup>*A. baumannii* strain MRSN 11695 was deposited as being resistant to trimethoprim/sulfamethoxazole. Repeated antibiotic susceptibility testing determined that for strain MRSN 11695, the trimethoprim/sulfamethoxazole MICs are 2 µg per mL and 4 µg per mL, which are interpreted as sensitive and resistant, respectively. Testing was performed in duplicate.

<sup>5</sup>*A. baumannii*, strain MRSN 11695 was deposited as resistant to ampicillin/subactam, but showed a MIC of 4 to 6 µg per mL (interpreted as sensitive) for this antibiotic during QC testing. Testing was performed in quadruplicate.

<sup>6</sup>*A. baumannii*, strain MRSN 11695 was deposited as intermediately resistant to tetracycline, but showed a MIC of ≥ 256 µg per mL (interpreted as resistant) for this antibiotic during QC testing. Testing was performed in quadruplicate.

Figure 1: Colony Morphology



/Heather Couch/

Heather Couch

08 APR 2021

Program Manager or designee, ATCC Federal Solutions

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**Acinetobacter baumannii, Strain MRSN 11703**

**Catalog No. NR-52189**

This reagent is the tangible property of the U.S. Government.

**Product Description:**

*Acinetobacter baumannii* (*A. baumannii*), strain MRSN 11703 was isolated in in 2007 from a human wound sample in the United States as part of a global surveillance program. *A. baumannii*, strain MRSN 11703 was deposited as sensitive to ampicillin/sulbactam, colistin and imipenem, intermediately resistant to meropenem, and resistant to amikacin, cefepime, ceftazidime, ceftriaxone, ciprofloxacin, gentamicin, levofloxacin, tetracycline, tobramycin and trimethoprim/sulfamethoxazole. NR-52189 lot 70039040 was produced by inoculation of the deposited material into Tryptic Soy broth and grown for 1 day at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar kolles, which were grown for 1 day at 37°C in an aerobic atmosphere to produce this lot. Quality control testing was completed under propagation conditions unless otherwise noted.

**Lot: 70039040**

**Manufacturing Date: 10SEP2020**

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TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis</b> Cellular morphology Colony morphology  Growth at 44°C ± 2°C <sup>1</sup> 1 day in an aerobic atmosphere on Tryptic Soy agar Motility Remel™ Motility Test Medium w/TTC Indicator for 1 day at 37°C in an aerobic atmosphere VITEK® MS (MALDI-TOF)	Gram-negative rods Report results  Growth  Report results  <i>A. baumannii</i>	Gram-negative rods Circular, convex, entire, smooth and cream (Figure 1) Growth  Non-motile  <i>A. baumannii</i> (99.9%)
<b>Antibiotic Susceptibility Profile<sup>2,3</sup></b> Amikacin Ampicillin/sulbactam Cefepime Ceftriaxone Ceftazidime Ciprofloxacin Colistin Gentamicin Imipenem Levofloxacin Meropenem Trimethoprim/sulfamethoxazole Tobramycin Tetracycline	Resistant Sensitive Resistant Resistant Resistant Resistant Sensitive Resistant Sensitive Resistant Intermediate Resistant Resistant Resistant	Resistant (> 256 µg/mL) Sensitive (4 µg/mL) Resistant (32 µg/mL) Resistant (≥ 32 µg/mL) Resistant (≥ 64 µg/mL) Resistant (≥ 4 µg/mL) Sensitive (≤ 0.25 µg/mL) Resistant (≥ 16 µg/mL) Sensitive (≤ 2 µg/mL) Resistant (8 µg/mL) Intermediate (2 to 4 µg/mL) <sup>4</sup> Resistant (> 4 µg/mL) Resistant (≥ 16 µg/mL) Resistant (> 256 µg/mL)
<b>Genotypic Analysis</b> Sequencing of 16S ribosomal RNA gene (~ 1140 base pairs)	≥ 99% sequence identity to <i>A. baumannii</i> , strain MRSN 11703 (GenBank: VHHH01000055.1)	100% sequence identity to <i>A. baumannii</i> , strain MRSN 11703 (GenBank: VHHH01000055.1)

TEST	SPECIFICATIONS	RESULTS
<b>Purity</b> 7 days at 37°C in an aerobic atmosphere with and without 5% CO <sub>2</sub> on Tryptic Soy agar	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology
<b>Viability</b>	Growth	Growth

<sup>1</sup>Growth at 44°C differentiates *A. baumannii* from *A. calcoaceticus* and *A. pittii*, which do not grow at 44°C.

<sup>2</sup>Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S28 (2018)

<sup>3</sup>Antibiotic susceptibility was tested using a combination of VITEK<sup>®</sup>2 GN82, Sensititre GNX2F AST and E-test strips.

<sup>4</sup>The susceptibility result for this antibiotic is within one doubling dilution of specification, which is considered an equivalent result.

Figure 1: Colony Morphology



/Heather Couch/

Heather Couch

Program Manager or designee, ATCC Federal Solutions

12 JAN 2022

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**Acinetobacter baumannii, Strain MRSN 11816**

**Catalog No. NR-52190**

This reagent is the tangible property of the U.S. Government.

**Product Description:**

*Acinetobacter baumannii* (*A. baumannii*), strain MRSN 11816 was isolated in 2008 from a human wound sample in the United States as part of a global surveillance program. *A. baumannii*, strain MRSN 11816 was deposited as sensitive to amikacin, ampicillin/sulbactam, cefepime, ceftazidime, ceftriaxone, ciprofloxacin, colistin, imipenem, levofloxacin, meropenem, tobramycin, trimethoprim/sulfamethoxazole and tetracycline, and intermediately resistant to gentamicin. NR-52190 lot 70042457 was produced by inoculation of the deposited material into Tryptic Soy broth and grown for 1 day at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar kolles, which were grown for 1 day at 37°C in an aerobic atmosphere to produce this lot. Quality control testing was completed under propagation conditions unless otherwise noted.

**Lot: 70042457**

**Manufacturing Date: 24FEB2021**

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TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis</b> Cellular morphology Colony morphology  Growth at 44°C ± 2°C <sup>1</sup> 1 day in an aerobic atmosphere on Tryptic Soy agar Motility Remel™ Motility Test Medium w/TTC Indicator for 1 day at 37°C in an aerobic atmosphere VITEK® MS (MALDI-TOF)	Gram-negative rods Report results  Growth  Report results  <i>A. baumannii</i>	Gram-negative rods Circular, convex, entire, smooth and cream Growth  Non-motile  <i>A. baumannii</i> (99.9%)
<b>Antibiotic Susceptibility Profile<sup>2,3</sup></b> Amikacin Ampicillin/sulbactam Cefepime Ceftriaxone Ceftazidime Ciprofloxacin Colistin Gentamicin Imipenem Levofloxacin Meropenem Trimethoprim/sulfamethoxazole Tobramycin Tetracycline	Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Intermediate Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive	Sensitive (≤ 4 µg/mL) Sensitive (≤ 2 µg/mL) Sensitive (≤ 2 µg/mL) Intermediate (12 µg/mL) <sup>4</sup> Sensitive (4 µg/mL) Sensitive (≤ 0.25 µg/mL) Sensitive (≤ 0.25 µg/mL) Sensitive (1.5 µg/mL) <sup>5</sup> Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 0.5 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (3 µg/mL)
<b>Genotypic Analysis</b> Sequencing of 16S ribosomal RNA gene (~ 1480 base pairs)	≥ 99% sequence identity to <i>A. baumannii</i> , strain MRSN 11816 (GenBank: VHHE01000051.1)	100% sequence identity to <i>A. baumannii</i> , strain MRSN 11816 (GenBank: VHHE01000051.1)

TEST	SPECIFICATIONS	RESULTS
<b>Purity</b> 7 days at 37°C in an aerobic atmosphere with and without 5% CO <sub>2</sub> on Tryptic Soy agar	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology
<b>Viability</b>	Growth	Growth

<sup>1</sup>Growth at 44°C differentiates *A. baumannii* from *A. calcoaceticus* and *A. pittii*, which do not grow at 44°C.

<sup>2</sup>Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S28 (2018)

<sup>3</sup>Antibiotic susceptibility was tested using a combination of VITEK<sup>®</sup>2 GN82, Sensititre GNX2F AST and E-test strips.

<sup>4</sup>The susceptibility result for this antibiotic is within one doubling dilution of specification, which is considered an equivalent result.

<sup>5</sup>*A. baumannii*, strain MRSN 11816 was deposited as being intermediately resistant to gentamicin. Repeated antibiotic susceptibility testing determined that for strain MRSN 11816 the gentamicin MIC is 1.5 µg per mL, which is interpreted as sensitive. Testing was performed in duplicate.

/Heather Couch/

Heather Couch

13 JAN 2022

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**Acinetobacter baumannii, Strain MRSN 14193**

**Catalog No. NR-52191**

This reagent is the tangible property of the U.S. Government.

**Product Description:**

*Acinetobacter baumannii* (*A. baumannii*), strain MRSN 14193 was isolated in 2012 from a human wound sample in Central America as part of a global surveillance program. *A. baumannii*, strain MRSN 14193 was deposited as sensitive to colistin, intermediately resistant to tobramycin, and resistant to amikacin, ampicillin/sulbactam, cefepime, ceftazidime, ceftriaxone, ciprofloxacin, gentamicin, imipenem, levofloxacin, meropenem, tetracycline and trimethoprim/sulfamethoxazole. NR-52191 lot 70039042 was produced by inoculation of the deposited material into Tryptic Soy broth and grown for 1 day at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar kolles, which were grown for 1 day at 37°C in an aerobic atmosphere to produce this lot. Quality control testing was completed under propagation conditions unless otherwise noted.

**Lot: 70039042**

**Manufacturing Date: 10SEP2020**

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TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis</b> Cellular morphology Colony morphology  Growth at 44°C ± 2°C <sup>1</sup> 1 day in an aerobic atmosphere on Tryptic Soy agar Motility Remel™ Motility Test Medium w/TTC Indicator for 1 day at 37°C in an aerobic atmosphere VITEK® MS (MALDI-TOF)	Gram-negative rods Report results  Growth  Report results  <i>A. baumannii</i>	Gram-negative rods Circular, convex, entire, smooth and cream (Figure 1) Growth  Non-motile  <i>A. baumannii</i> (99.9%)
<b>Antibiotic Susceptibility Profile<sup>2,3</sup></b> Amikacin Ampicillin/sulbactam Cefepime Ceftriaxone Ceftazidime Ciprofloxacin Colistin Gentamicin Imipenem Levofloxacin Meropenem Trimethoprim/sulfamethoxazole Tobramycin Tetracycline	Resistant Resistant Resistant Resistant Resistant Resistant Sensitive Resistant Resistant Resistant Resistant Resistant Resistant Resistant Resistant Intermediate Resistant	Resistant (> 256 µg/mL) Resistant (48 µg/mL) Resistant (> 256 µg/mL) Resistant (≥ 64 µg/mL) Resistant (≥ 64 µg/mL) Resistant (≥ 4 µg/mL) Sensitive (≤ 2 µg/mL) Resistant (≥ 16 µg/mL) Resistant (> 8 µg/mL) Resistant (≥ 32 µg/mL) Resistant (> 8 µg/mL) Resistant (4 µg/mL) Intermediate (8 µg/mL) Resistant (> 256 µg/mL)
<b>Genotypic Analysis</b> Sequencing of 16S ribosomal RNA gene (~ 1470 base pairs)	≥ 99% sequence identity to <i>A. baumannii</i> , strain MRSN 14193 (GenBank: VHGZ01000068.1)	100% sequence identity to <i>A. baumannii</i> , strain MRSN 14193 (GenBank: VHGZ01000068.1)



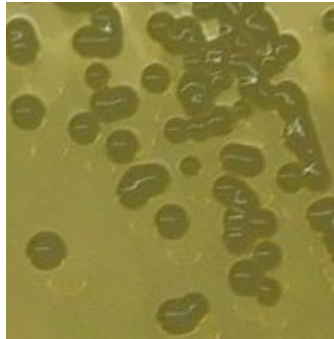
TEST	SPECIFICATIONS	RESULTS
<b>Purity</b> 7 days at 37°C in an aerobic atmosphere with and without 5% CO <sub>2</sub> on Tryptic Soy agar	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology
<b>Viability</b>	Growth	Growth

<sup>1</sup>Growth at 44°C differentiates *A. baumannii* from *A. calcoaceticus* and *A. pittii*, which do not grow at 44°C.

<sup>2</sup>Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S28 (2018)

<sup>3</sup>Antibiotic susceptibility was tested using a combination of VITEK®2 GN82, Sensititre GNX2F AST and E-test strips.

Figure 1: Colony Morphology



/Heather Couch/  
Heather Couch

14 JAN 2022

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***Acinetobacter baumannii*, Strain MRSN 14237**

**Catalog No. NR-52192**

This reagent is the tangible property of the U.S. Government.

**Product Description:**

*Acinetobacter baumannii* (*A. baumannii*), strain MRSN 14237 was isolated in 2012 from a human wound in Central America as part of a global surveillance program. *A. baumannii*, strain MRSN 14237 was deposited as sensitive to colistin and resistant to amikacin, ceftazidime, ciprofloxacin, ceftriaxone, cefepime, gentamicin, imipenem, trimethoprim/sulfamethoxazole, levofloxacin, meropenem, tobramycin, tetracycline and ampicillin/sulbactam. NR-52192 lot 70039044 was produced by inoculation of the deposited material into Tryptic Soy broth and grown for 1 day at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar kolles, which were grown for 1 day at 37°C in an aerobic atmosphere to produce this lot. Quality control testing was completed under propagation conditions unless otherwise noted.

**Lot: 70039044**

**Manufacturing Date: 10SEP2020**

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TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis</b> Cellular morphology Colony morphology  Growth at 44°C ± 2°C <sup>1</sup> 1 day in an aerobic atmosphere on Tryptic Soy agar  Motility Remel™ Motility Test Medium w/TTC Indicator for 1 day at 37°C in an aerobic atmosphere  VITEK® MS (MALDI-TOF)	Gram-negative rods Report results  Growth  Report results  <i>A. baumannii</i>	Gram-negative rods Circular, convex, entire, smooth and cream (Figure 1) Growth  Non-motile  <i>A. baumannii</i> (99.9%)
<b>Antibiotic Susceptibility Profile<sup>2,3</sup></b> Amikacin Ampicillin/sulbactam Cefepime Ceftriaxone Ceftazidime Ciprofloxacin Colistin Gentamicin Imipenem Levofloxacin Meropenem Trimethoprim/sulfamethoxazole Tobramycin Tetracycline	Resistant Resistant Resistant Resistant Resistant Resistant Sensitive Resistant Resistant Resistant Resistant Resistant Resistant Resistant Resistant	Resistant (≥ 256 µg/mL) Resistant (32 µg/mL) Resistant (64 µg/mL) Resistant (≥ 64 µg/mL) Resistant (≥ 64 µg/mL) Resistant (≥ 4 µg/mL) Sensitive (≤ 0.25 µg/mL) Resistant (≥ 16 µg/mL) Resistant (> 8 µg/mL) Resistant (≥ 32 µg/mL) Resistant (> 8 µg/mL) Resistant (> 4 µg/mL) Resistant (≥ 16 µg/mL) Resistant (> 256 µg/mL)
<b>Genotypic Analysis</b> Sequencing of 16S ribosomal RNA gene (~ 1400 base pairs)	≥ 99% sequence identity to <i>A. baumannii</i> , strain MRSN 14237 (GenBank: VHGY01000102.1)	99.9% sequence identity to <i>A. baumannii</i> , strain MRSN 14237 (GenBank: VHGY01000102.1)
<b>Purity</b> 7 days at 37°C in an aerobic atmosphere with and without 5% CO <sub>2</sub> on Tryptic Soy agar	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology

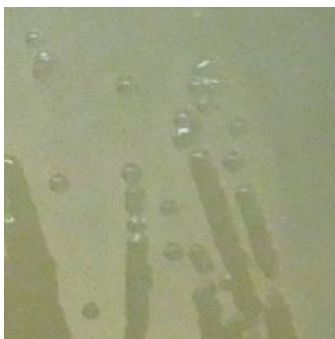
TEST	SPECIFICATIONS	RESULTS
Viability	Growth	Growth

<sup>1</sup>Growth at 44°C differentiates *A. baumannii* from *A. calcoaceticus* and *A. pittii*, which do not grow at 44°C.

<sup>2</sup>Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S28 (2018)

<sup>3</sup>Antibiotic susceptibility was tested using a combination of VITEK<sup>®</sup>2 GN82, Sensititre™ GNX2F AST and E-test strips.

Figure 1: Colony Morphology



/Heather Couch/  
Heather Couch

23 JUL 2021

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**Acinetobacter baumannii, Strain MRSN 14427**

**Catalog No. NR-52193**

This reagent is the tangible property of the U.S. Government.

**Product Description:**

*Acinetobacter baumannii* (*A. baumannii*), strain MRSN 14427 was isolated in 2012 from human blood in Afghanistan as part of a global surveillance program. NR-52193 was deposited as multi-locus sequence type (MLST) ST 622, sensitive to colistin and tetracycline and resistant to amikacin, ceftazidime, ciprofloxacin, ceftriaxone, cefepime, gentamicin, imipenem, trimethoprim/sulfamethoxazole, levofloxacin, meropenem, tobramycin and ampicillin/sulbactam. NR-52193 was produced by inoculation of the deposited material into Tryptic Soy broth and grown for 1 day at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar kolles, which were grown for 1 day at 37°C in an aerobic atmosphere to produce this lot. Quality control testing was completed under propagation conditions unless otherwise noted.

**Lot: 70038240**

**Manufacturing Date: 19AUG2020**

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TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis</b> Cellular morphology Colony morphology  Growth at 44°C ± 2°C <sup>1</sup> 1 day in an aerobic atmosphere on Tryptic Soy agar  Motility BBL™ Motility Test Medium w/TTC Indicator for 1 day at 37°C in an aerobic atmosphere  VITEK® MS (MALDI-TOF)	Gram-negative rods Report results  Growth  Report results  <i>A. baumannii</i>	Gram-negative rods Circular, convex, entire, smooth and cream (Figure 1) Growth  Non-motile  <i>A. baumannii</i> (99.9%)
<b>Antibiotic Susceptibility Profile<sup>2,3</sup></b> Amikacin Ampicillin/sulbactam Cefepime Ceftriaxone Ceftazidime Ciprofloxacin Colistin Gentamicin Imipenem Levofloxacin Meropenem Trimethoprim/sulfamethoxazole Tobramycin Tetracycline	Resistant Resistant Resistant Resistant Resistant Resistant Sensitive Resistant Resistant Resistant Resistant Resistant Resistant Resistant Resistant Sensitive	Resistant (> 256 µg/mL) Resistant (64 µg/mL) Resistant (> 256 µg/mL) Resistant (≥ 64 µg/mL) Resistant (≥ 64 µg/mL) Resistant (≥ 4 µg/mL) Sensitive (≤ 0.25 µg/mL) Resistant (≥ 16 µg/mL) Resistant (≥ 16 µg/mL) Resistant (≥ 8 µg/mL) Resistant (> 8 µg/mL) Resistant (> 4 µg/mL) Resistant (≥ 16 µg/mL) Resistant (> 12 µg/mL) <sup>4</sup>
<b>Genotypic Analysis</b> Sequencing of 16S ribosomal RNA gene (~ 1480 base pairs)	≥ 99% sequence identity to <i>A. baumannii</i> , strain MRSN 14427 (GenBank: VHGX01000082.1)	99.8% sequence identity to <i>A. baumannii</i> , strain MRSN 14427 (GenBank: VHGX01000082.1)
<b>Purity</b> 8 days at 37°C in an aerobic atmosphere with and without 5% CO <sub>2</sub> on Tryptic Soy agar	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology

TEST	SPECIFICATIONS	RESULTS
Viability	Growth	Growth

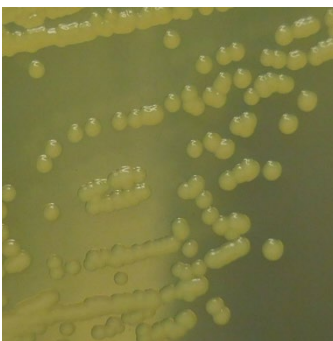
<sup>1</sup>Growth at 44°C differentiates *A. baumannii* from *A. calcoaceticus* and *A. pittii*, which do not grow at 44°C.

<sup>2</sup>Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S28 (2018)

<sup>3</sup>Antibiotic susceptibility was tested using a combination of VITEK<sup>®</sup>2 GN82, Sensititre GNX2F AST and E-test strips.

<sup>4</sup>*A. baumannii*, strain MRSN 14427 was deposited as sensitive to tetracycline, but showed a MIC of > 12 µg/mL (interpreted as resistant) for tetracycline during QC testing. Testing was performed in duplicate.

Figure 1: Colony Morphology



/Heather Couch/  
Heather Couch

Program Manager or designee, ATCC Federal Solutions

08 JUN 2021

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**Acinetobacter baumannii, Strain MRSN 15049**

**Catalog No. NR-52194**

This reagent is the tangible property of the U.S. Government.

**Product Description:**

*Acinetobacter baumannii* (*A. baumannii*), strain MRSN 15049 was isolated in 2013 from a respiratory specimen in Asia as part of a global surveillance program. *A. baumannii*, strain MRSN 15049 was deposited as sensitive to colistin and tobramycin, resistant to amikacin, cefepime, ceftazidime, ceftriaxone, ciprofloxacin, gentamicin, imipenem, levofloxacin, meropenem, trimethoprim/sulfamethoxazole and tetracycline, and intermediately resistant to ampicillin/sulbactam. NR-52194 lot 70039045 was produced by inoculation of the deposited material into Tryptic Soy broth and grown for 1 day at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar kolles, which were grown for 1 day at 37°C in an aerobic atmosphere to produce this lot. Quality control testing was completed under propagation conditions unless otherwise noted.

**Lot: 70039045**

**Manufacturing Date: 23SEP2020**

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TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis</b> Cellular morphology Colony morphology  Growth at 44°C ± 2°C <sup>1</sup> 1 day in an aerobic atmosphere on Tryptic Soy agar  Motility Remel™ Motility Test Medium w/TTC Indicator for 1 day at 37°C in an aerobic atmosphere  VITEK® MS (MALDI-TOF)	Gram-negative rods Report results  Growth  Report results  <i>A. baumannii</i>	Gram-negative rods Circular, convex, entire, smooth and cream (Figure 1) Growth  Non-motile  <i>A. baumannii</i> (99.9%)
<b>Antibiotic Susceptibility Profile<sup>2,3</sup></b> Amikacin Ampicillin/sulbactam Cefepime Ceftriaxone Ceftazidime Ciprofloxacin Colistin Gentamicin Imipenem Levofloxacin Meropenem Trimethoprim/sulfamethoxazole Tobramycin Tetracycline	Resistant Intermediate Resistant Resistant Resistant Resistant Sensitive Resistant Resistant Resistant Resistant Resistant Resistant Sensitive Resistant	Resistant (≥ 256 µg/mL) Intermediate (16 µg/mL) Resistant (≥ 256 µg/mL) Resistant (≥ 32 µg/mL) Resistant (≥ 64 µg/mL) Resistant (≥ 4 µg/mL) Sensitive (0.5 to 1 µg/mL) Sensitive (4 µg/mL) <sup>4</sup> Resistant (8 µg/mL) Resistant (≥ 8 µg/mL) Resistant (≥ 16 µg/mL) Resistant (≥ 4 µg/mL) Sensitive (≤ 1µg/mL) Resistant (≥ 256 µg/mL)
<b>Genotypic Analysis</b> Sequencing of 16S ribosomal RNA gene (~ 1480 base pairs)	≥ 99% sequence identity to <i>A. baumannii</i> , strain MRSN 15049 (GenBank: VHGW01000106.1)	100% sequence identity to <i>A. baumannii</i> , strain MRSN 15049 (GenBank: VHGW01000106.1)

TEST	SPECIFICATIONS	RESULTS
<b>Purity</b> 7 days at 37°C in an aerobic atmosphere with and without 5% CO <sub>2</sub> on Tryptic Soy agar	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology
<b>Viability</b>	Growth	Growth

<sup>1</sup>Growth at 44°C differentiates *A. baumannii* from *A. calcoaceticus* and *A. pittii*, which do not grow at 44°C.

<sup>2</sup>Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S28 (2018)

<sup>3</sup>Antibiotic susceptibility was tested using a combination of VITEK<sup>®</sup>2 GN82, Sensititre<sup>™</sup> GNX2F AST and E-test strips.

<sup>4</sup>*A. baumannii*, strain MRSN 15049 was deposited as resistant to gentamicin, but showed a MIC of 4 µg/mL (interpreted as sensitive) for this antibiotic during QC testing. Testing was performed in duplicate.

Figure 1: Colony Morphology



/Heather Couch/  
Heather Couch

20 AUG 2021

Program Manager or designee, ATCC Federal Solutions

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**Acinetobacter baumannii, Strain MRSN 15070**

**Catalog No. NR-52195**

This reagent is the tangible property of the U.S. Government.

**Product Description:**

*Acinetobacter baumannii* (*A. baumannii*), strain MRSN 15070 was isolated in 2003 from a human wound in the United States as part of a global surveillance program. NR-52195 was deposited as sensitive to amikacin, ampicillin/sulbactam, cefepime, ceftazidime, ceftriaxone, ciprofloxacin, colistin, gentamicin, imipenem, levofloxacin, meropenem, tobramycin, tetracycline and trimethoprim/sulfamethoxazole. NR-52195 lot 70042461 was produced by inoculation of the deposited material into Tryptic Soy broth and grown for 1 day at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar kolles, which were grown for 1 day at 37°C in an aerobic atmosphere to produce this lot. Quality control testing was completed under propagation conditions unless otherwise noted.

**Lot: 70042461**

**Manufacturing Date: 04MAR2021**

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TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis</b> Cellular morphology Colony morphology  Growth at 44°C ± 2°C <sup>1</sup> 1 day in an aerobic atmosphere on Tryptic Soy agar  Motility BBL™ Motility Test Medium w/TTC Indicator for 1 day at 35°C in an aerobic atmosphere  VITEK® MS (MALDI-TOF)	Gram-negative rods Report results  Growth  Report results  <i>A. baumannii</i>	Gram-negative rods Circular, convex, entire, smooth and cream (Figure 1) Growth  Non-motile  <i>A. baumannii</i> (99.9%)
<b>Antibiotic Susceptibility Profile<sup>2,3</sup></b> Amikacin Ampicillin/sulbactam Cefepime Ceftriaxone Ceftazidime Ciprofloxacin Colistin Gentamicin Imipenem Levofloxacin Meropenem Trimethoprim/sulfamethoxazole Tobramycin Tetracycline	Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive	Sensitive (≤ 4 µg/mL) Sensitive (1.5 µg/mL) Sensitive (≤ 2 µg/mL) Intermediate (16 µg/mL) <sup>4</sup> Sensitive (4 µg/mL) Sensitive (≤ 0.25 µg/mL) Sensitive (≤ 0.25 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 0.5 µg/mL) Sensitive (≤ 1 µg/mL) Intermediate (6 µg/mL) <sup>4</sup>
<b>Genotypic Analysis</b> Sequencing of 16S ribosomal RNA gene (1470 base pairs)	≥ 99% sequence identity to <i>A. baumannii</i> , strain MRSN 15070 (GenBank: VHG01000046.1)	100% sequence identity to <i>A. baumannii</i> , strain MRSN 15070 (GenBank: VHG01000046.1)
<b>Purity</b> 7 days at 37°C in an aerobic atmosphere with and without 5% CO <sub>2</sub> on Tryptic Soy agar	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology



TEST	SPECIFICATIONS	RESULTS
Viability	Growth	Growth

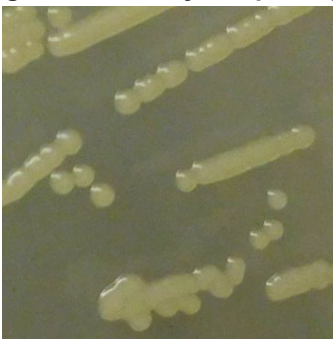
<sup>1</sup>Growth at 44°C differentiates *A. baumannii* from *A. calcoaceticus* and *A. pittii*, which do not grow at 44°C.

<sup>2</sup>Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S28 (2018)

<sup>3</sup>Antibiotic susceptibility was tested using a combination of VITEK<sup>®</sup>2 GN82, Sensititre GNX2F AST and E-test strips.

<sup>4</sup>The susceptibility result for this antibiotic is within one doubling dilution of specification, which is considered an equivalent result.

Figure 1: Colony Morphology



/Heather Couch/  
Heather Couch

17 JAN 2022

Program Manager or designee, ATCC Federal Solutions

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**Acinetobacter baumannii, Strain MRSN 15075**

**Catalog No. NR-52196**

This reagent is the tangible property of the U.S. Government.

**Product Description:**

*Acinetobacter baumannii* (*A. baumannii*), strain MRSN 15075 was isolated in 2003 from a human wound in the United States as part of a global surveillance program. NR-52196 was deposited as sensitive to amikacin, ampicillin/sulbactam, cefepime, ciprofloxacin, colistin, imipenem, levofloxacin, meropenem, tetracycline, tobramycin and trimethoprim/sulfamethoxazole, intermediately resistant to ceftriaxone and gentamicin and resistant to ceftazidime. NR-52196 lot 70042459 was produced by inoculation of the deposited material into Tryptic Soy broth and grown for 1 day at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar kolles, which were grown for 1 day at 37°C in an aerobic atmosphere to produce this lot. Quality control testing was completed under propagation conditions unless otherwise noted.

**Lot: 70042459**

**Manufacturing Date: 04MAR2021**

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TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis</b> Cellular morphology Colony morphology  Growth at 44°C ± 2°C <sup>1</sup> 1 day in an aerobic atmosphere on Tryptic Soy agar  Motility BBL™ Motility Test Medium w/TTC Indicator for 1 day at 35°C in an aerobic atmosphere  VITEK® MS (MALDI-TOF)	Gram-negative rods Report results  Growth  Report results  <i>A. baumannii</i>	Gram-negative rods Circular, convex, entire, smooth and cream (Figure 1) Growth  Non-motile  <i>A. baumannii</i> (99.9%)
<b>Antibiotic Susceptibility Profile<sup>2,3</sup></b> Amikacin Ampicillin/sulbactam Cefepime Ceftriaxone Ceftazidime Ciprofloxacin Colistin Gentamicin Imipenem Levofloxacin Meropenem Trimethoprim/sulfamethoxazole Tobramycin Tetracycline	Sensitive Sensitive Sensitive Intermediate Resistant Sensitive Sensitive Intermediate Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive	Sensitive (8 µg/mL) Sensitive (≤ 2 µg/mL) Sensitive (≤ 2 µg/mL) Intermediate (16 µg/mL) Sensitive (2 to 3 µg/mL) <sup>4</sup> Sensitive (≤ 0.25 µg/mL) Sensitive (≤ 0.25 µg/mL) Sensitive (2 to 3 µg/mL) <sup>5</sup> Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 0.5 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (4 µg/mL)
<b>Genotypic Analysis</b> Sequencing of 16S ribosomal RNA gene (~ 1480 base pairs)	≥ 99% sequence identity to <i>A. baumannii</i> , strain MRSN 15075 (GenBank: VHGU01000069.1)	100% sequence identity to <i>A. baumannii</i> , strain MRSN 15075 (GenBank: VHGU01000069.1)
<b>Purity</b> 7 days at 37°C in an aerobic atmosphere with and without 5% CO <sub>2</sub> on Tryptic Soy agar	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology

TEST	SPECIFICATIONS	RESULTS
Viability	Growth	Growth

<sup>1</sup>Growth at 44°C differentiates *A. baumannii* from *A. calcoaceticus* and *A. pittii*, which do not grow at 44°C.

<sup>2</sup>Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S28 (2018)

<sup>3</sup>Antibiotic susceptibility was tested using a combination of VITEK<sup>®</sup>2 GN82, Sensititre GNX2F AST and E-test strips.

<sup>4</sup>*A. baumannii*, strain MRSN 15075 was deposited as resistant to ceftazidime, but showed a MIC of 2 to 3 µg per mL (interpreted as sensitive) for this antibiotic during QC testing. Testing was performed in duplicate.

<sup>5</sup>*A. baumannii*, strain MRSN 15075 was deposited as intermediately resistant to gentamicin, but showed a MIC of 2 to 3 µg per mL (interpreted as sensitive) for this antibiotic during QC testing. Testing was performed in duplicate.

Figure 1: Colony Morphology



/Heather Couch/

Heather Couch

03 FEB 2022

Program Manager or designee, ATCC Federal Solutions

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**Acinetobacter baumannii, Strain MRSN 15088**

**Catalog No. NR-52197**

This reagent is the tangible property of the U.S. Government.

**Product Description:**

*Acinetobacter baumannii* (*A. baumannii*), strain MRSN 15088 was isolated in 2003 from a human wound in the United States as part of a global surveillance program. *A. baumannii*, strain MRSN 15088 was deposited as sensitive to amikacin, ampicillin/sulbactam, cefepime, ceftazidime, ceftriaxone, ciprofloxacin, colistin, gentamicin, imipenem, levofloxacin, meropenem, tobramycin, tetracycline and trimethoprim/sulfamethoxazole. NR-52197 lot 70042463 was produced by inoculation of the deposited material into Tryptic Soy broth and grown for 1 day at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar kolles, which were grown for 1 day at 37°C in an aerobic atmosphere to produce this lot. Quality control testing was completed under propagation conditions unless otherwise noted.

**Lot: 70042463**

**Manufacturing Date: 04MAR2021**

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TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis</b> Cellular morphology Colony morphology  Growth at 44°C ± 2°C <sup>1</sup> 1 day in an aerobic atmosphere on Tryptic Soy agar Motility Remel™ Motility Test Medium w/TTC Indicator for 1 day at 37°C in an aerobic atmosphere VITEK® MS (MALDI-TOF)	Gram-negative rods Report results  Growth  Report results  <i>A. baumannii</i>	Gram-negative rods Circular, convex, entire, smooth and cream (Figure 1) Growth  Motile  <i>A. baumannii</i> (99.9%)
<b>Antibiotic Susceptibility Profile<sup>2,3</sup></b> Amikacin Ampicillin/sulbactam Cefepime Ceftriaxone Ceftazidime Ciprofloxacin Colistin Gentamicin Imipenem Levofloxacin Meropenem Trimethoprim/sulfamethoxazole Tobramycin Tetracycline	Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive	Sensitive (8 µg/mL) Sensitive (0.75 µg/mL) Sensitive (0.75 to 1 µg/mL) Sensitive to Intermediate (8 to 16 µg/mL) <sup>4</sup> Sensitive (4 µg/mL) Sensitive (≤ 0.25 µg/mL) Sensitive (≤ 0.25 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 0.5 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (2 µg/mL)
<b>Genotypic Analysis</b> Sequencing of 16S ribosomal RNA gene (~ 1490 base pairs)	≥ 99% sequence identity to <i>A. baumannii</i> , strain MRSN 15088 (GenBank: VHGT01000047.1)	99.8% sequence identity to <i>A. baumannii</i> , strain MRSN 15088 (GenBank: VHGT01000047.1)
<b>Purity</b> 7 days at 37°C in an aerobic atmosphere with and without 5% CO <sub>2</sub> on Tryptic Soy agar	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology

TEST	SPECIFICATIONS	RESULTS
Viability	Growth	Growth

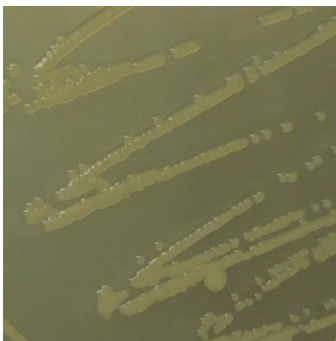
<sup>1</sup>Growth at 44°C differentiates *A. baumannii* from *A. calcoaceticus* and *A. pittii*, which do not grow at 44°C.

<sup>2</sup>Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S28 (2018)

<sup>3</sup>Antibiotic susceptibility was tested using a combination of VITEK<sup>®</sup>2 GN82, Sensititre<sup>™</sup> GNX2F AST and E-test strips.

<sup>4</sup>Susceptibility result for this antibiotic is within one doubling dilution of specification, which is considered an equivalent result.

Figure 1: Colony Morphology



/Heather Couch/  
Heather Couch

07 JUL 2021

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**Acinetobacter baumannii, Strain MRSN 15093**

**Catalog No. NR-52198**

This reagent is the tangible property of the U.S. Government.

**Product Description:**

*Acinetobacter baumannii* (*A. baumannii*), strain MRSN 15093 was isolated in 2012 from a human wound in South America as part of a global surveillance program. *A. baumannii*, strain MRSN 15093 was deposited as sensitive to amikacin, ampicillin/sulbactam, cefepime, ceftazidime, ceftriaxone, ciprofloxacin, colistin, gentamicin, imipenem, levofloxacin, meropenem, tetracycline, trimethoprim/sulfamethoxazole and tobramycin. NR-52198 lot 70042466 was produced by inoculation of the deposited material into Tryptic Soy broth and grown for 1 day at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar kolles, which were grown for 1 day at 37°C in an aerobic atmosphere to produce this lot. Quality control testing was completed under propagation conditions unless otherwise noted.

**Lot: 70042466**

**Manufacturing Date: 26FEB2021**

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TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis</b> Cellular morphology Colony morphology  Growth at 44°C ± 2°C <sup>1</sup> 1 day in an aerobic atmosphere on Tryptic Soy agar Motility Remel™ Motility Test Medium w/TTC Indicator for 1 day at 37°C in an aerobic atmosphere VITEK® MS (MALDI-TOF)	Gram-negative rods Report results  Growth  Report results  <i>A. baumannii</i>	Gram-negative rods Circular, convex, entire, smooth and cream (Figure 1) Growth  Motile  <i>A. baumannii</i> (99.9%)
<b>Antibiotic Susceptibility Profile<sup>2,3</sup></b> Amikacin Ampicillin/sulbactam Cefepime Ceftriaxone Ceftazidime Ciprofloxacin Colistin Gentamicin Imipenem Levofloxacin Meropenem Trimethoprim/sulfamethoxazole Tobramycin Tetracycline	Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive	Sensitive (8 µg/mL) Sensitive (1 µg/mL) Sensitive (1.5 µg/mL) Intermediate (12 to 16 µg/mL) <sup>4</sup> Sensitive (4 µg/mL) Sensitive (≤ 0.25 µg/mL) Sensitive (≤ 0.25 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 0.5 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (3 µg/mL)
<b>Genotypic Analysis</b> Sequencing of 16S ribosomal RNA gene (~ 1250 base pairs)	≥ 99% sequence identity to <i>A. baumannii</i> , strain MRSN 15093 (GenBank: VHGS0100083.1)	100% sequence identity to <i>A. baumannii</i> , strain MRSN 15093 (GenBank: VHGS0100083.1)
<b>Purity</b> 7 days at 37°C in an aerobic atmosphere with and without 5% CO <sub>2</sub> on Tryptic Soy agar	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology

TEST	SPECIFICATIONS	RESULTS
Viability	Growth	Growth

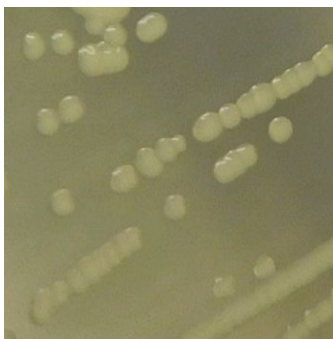
<sup>1</sup>Growth at 44°C differentiates *A. baumannii* from *A. calcoaceticus* and *A. pittii*, which do not grow at 44°C.

<sup>2</sup>Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S28 (2018)

<sup>3</sup>Antibiotic susceptibility was tested using a combination of VITEK<sup>®</sup>2 GN82, Sensititre GNX2F AST and E-test strips.

<sup>4</sup>The susceptibility result for this antibiotic is within one doubling dilution of specification, which is considered an equivalent result.

Figure 1: Colony Morphology



/Heather Couch/  
Heather Couch

18 JAN 2022

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**Acinetobacter baumannii, Strain MRSN 15129**

**Catalog No. NR-52199**

This reagent is the tangible property of the U.S. Government.

**Product Description:**

*Acinetobacter baumannii* (*A. baumannii*), strain MRSN 15129 was isolated in 2012 from a human respiratory sample in South America as part of a global surveillance program. *A. baumannii*, strain MRSN 15129 was deposited as sensitive to amikacin, ceftazidime, colistin, imipenem, meropenem and ampicillin/sulbactam, intermediately resistant to ceftriaxone, cefepime and tobramycin and resistant to ciprofloxacin, gentamicin, trimethoprim/sulfamethoxazole, levofloxacin and tetracycline. NR-52199 lot 70040796 was produced by inoculation of the deposited material into Tryptic Soy broth and grown for 1 day at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar kolles, which were grown for 1 day at 37°C in an aerobic atmosphere to produce this lot. Quality control testing was completed under propagation conditions unless otherwise noted.

**Lot: 70040796**

**Manufacturing Date: 23DEC2020**

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TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis</b> Cellular morphology Colony morphology  Growth at 44°C ± 2°C <sup>1</sup> 1 day in an aerobic atmosphere on Tryptic Soy agar  Motility Remel™ Motility Test Medium w/TTC Indicator for 1 day at 37°C in an aerobic atmosphere  VITEK® MS (MALDI-TOF)	Gram-negative rods Report results  Growth  Report results  <i>A. baumannii</i>	Gram-negative rods Circular, convex, entire, smooth and cream (Figure 1) Growth  Motile  <i>A. baumannii</i> (99.9%)
<b>Antibiotic Susceptibility Profile<sup>2,3</sup></b> Amikacin Ampicillin/sulbactam Cefepime Ceftriaxone Ceftazidime Ciprofloxacin Colistin Gentamicin Imipenem Levofloxacin Meropenem Trimethoprim/sulfamethoxazole Tobramycin Tetracycline	Sensitive Sensitive Intermediate Intermediate Sensitive Resistant Sensitive Resistant Sensitive Resistant Sensitive Resistant Sensitive Resistant Intermediate Resistant	Sensitive (16 µg/mL) Sensitive (1.5 µg/mL) Intermediate (12 µg/mL) Intermediate (16 µg/mL) Sensitive (8 µg/mL) Resistant (≥ 4 µg/mL) Sensitive (≤ 0.5 µg/mL) Resistant (16 µg/mL) Sensitive (≤ 1 µg/mL) Resistant (> 32 µg/mL) Sensitive (≤ 1 µg/mL) Resistant (≥ 4 µg/mL) Sensitive (4 µg/mL) <sup>4</sup> Resistant (> 256 µg/mL)
<b>Genotypic Analysis</b> Sequencing of 16S ribosomal RNA gene (~ 1480 base pairs)	≥ 99% sequence identity to <i>A. baumannii</i> , strain MRSN 15129 (GenBank: VHGR01000048.1)	100% sequence identity to <i>A. baumannii</i> , strain MRSN 15129 (GenBank: VHGR01000048.1)
<b>Purity</b> 7 days at 37°C in an aerobic atmosphere with and without 5% CO <sub>2</sub> on Tryptic Soy agar	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology



TEST	SPECIFICATIONS	RESULTS
Viability	Growth	Growth

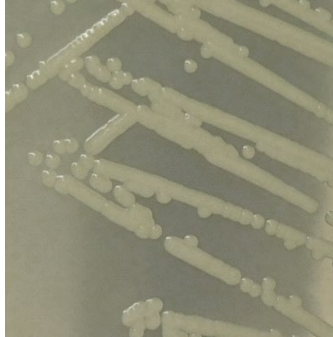
<sup>1</sup>Growth at 44°C differentiates *A. baumannii* from *A. calcoaceticus* and *A. pittii*, which do not grow at 44°C.

<sup>2</sup>Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S28 (2018)

<sup>3</sup>Antibiotic susceptibility was tested using a combination of VITEK<sup>®</sup>2 GN82, Sensititre™ GNX2F AST and E-test strips.

<sup>4</sup>The susceptibility result for this antibiotic is within one doubling dilution of specification, which is considered an equivalent result.

Figure 1: Colony Morphology



/Heather Couch/  
Heather Couch

26 JUL 2021

Program Manager or designee, ATCC Federal Solutions

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**Acinetobacter baumannii, Strain MRSN 15574**

**Catalog No. NR-52200**

This reagent is the tangible property of the U.S. Government.

**Product Description:**

*Acinetobacter baumannii* (*A. baumannii*), strain MRSN 15574 was isolated in 2012 from a human respiratory sample in Europe as part of a global surveillance program. *A. baumannii*, strain MRSN 15574 was deposited as sensitive to amikacin and colistin, and resistant to ampicillin/sulbactam, ceftazidime, ciprofloxacin, ceftriaxone, cefepime, gentamicin, imipenem, trimethoprim/sulfamethoxazole, levofloxacin, meropenem, tobramycin and tetracycline. NR-52200 lot 70038241 was produced by inoculation of the deposited material into Tryptic Soy broth and grown for 1 day at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar kolles, which were grown for 1 day at 37°C in an aerobic atmosphere to produce this lot. Quality control testing was completed under propagation conditions unless otherwise noted.

**Lot: 70038241**

**Manufacturing Date: 20AUG2020**

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TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis</b> Cellular morphology Colony morphology  Growth at 44°C ± 2°C <sup>1</sup> 1 day in an aerobic atmosphere on Tryptic Soy agar Motility BBL™ Motility Test Medium w/TTC Indicator for 1 day at 37°C in an aerobic atmosphere VITEK®2 GN VITEK® MS (MALDI-TOF)	Gram-negative rods Report results  Growth  Report results  <i>A. baumannii</i> (≥ 89%) <i>A. baumannii</i>	Gram-negative rods Circular, convex, entire, smooth and cream (Figure 1) Growth  Non-motile  <i>A. baumannii</i> (99%) <i>A. baumannii</i> (99.9%)
<b>Antibiotic Susceptibility Profile<sup>2,3</sup></b> Amikacin Ampicillin/sulbactam Cefepime Ceftriaxone Ceftazidime Ciprofloxacin Colistin Gentamicin Imipenem Levofloxacin Meropenem Trimethoprim/sulfamethoxazole Tobramycin Tetracycline	Sensitive Resistant Resistant Resistant Resistant Resistant Resistant Sensitive Resistant Resistant Resistant Resistant Resistant Resistant Resistant Resistant Resistant	Sensitive (4 µg/mL) Resistant (256 µg/mL) Resistant (> 256 µg/mL) Resistant (≥ 64 µg/mL) Resistant (≥ 64 µg/mL) Resistant (≥ 4 µg/mL) Sensitive (≤ 1 µg/mL) Intermediate (8 µg/mL) <sup>4</sup> Resistant (> 8 µg/mL) Intermediate (4 µg/mL) <sup>4</sup> Resistant (> 8 µg/mL) Resistant (> 4 µg/mL) Resistant (64 µg/mL) Resistant (≥ 256 µg/mL)
<b>Genotypic Analysis</b> Sequencing of 16S ribosomal RNA gene (1480 base pairs)	≥ 99% sequence identity to <i>A. baumannii</i> , strain MRSN 15574 (GenBank: VHGP0100080.1)	100% sequence identity to <i>A. baumannii</i> , strain MRSN 15574 (GenBank: VHGP0100080.1)

TEST	SPECIFICATIONS	RESULTS
<b>Purity</b> 7 days at 37°C in an aerobic atmosphere with and without 5% CO <sub>2</sub> on Tryptic Soy agar	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology
<b>Viability</b>	Growth	Growth

<sup>1</sup>Growth at 44°C differentiates *A. baumannii* from *A. calcoaceticus* and *A. pittii*, which do not grow at 44°C.

<sup>2</sup>Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S28 (2018)

<sup>3</sup>Antibiotic susceptibility was tested using a combination of VITEK2 GN82, Sensititre GNX2F AST and E-test strips.

<sup>4</sup>Susceptibility results for this antibiotic is within one doubling dilution of specification, which is considered an equivalent result.

Figure 1: Colony Morphology



/Heather Couch/  
Heather Couch

27 APR 2021

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**Acinetobacter baumannii, Strain MRSN 16880**

**Catalog No. NR-52201**

This reagent is the tangible property of the U.S. Government.

**Product Description:**

*Acinetobacter baumannii* (*A. baumannii*), strain MRSN 16880 was isolated in 2011 from a human blood sample in the United States as part of a global surveillance program. *A. baumannii*, strain MRSN 16880 was deposited as sensitive to ceftazidime, colistin, ceftriaxone, cefepime, imipenem, ampicillin/sulbactam and meropenem, intermediately resistant to amikacin and tobramycin, and resistant to ciprofloxacin, gentamicin, levofloxacin, tetracycline and trimethoprim/sulfamethoxazole. NR-52201 lot 70041122 was produced by inoculation of the deposited material into Tryptic Soy broth and grown for 1 day at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar kolles, which were grown for 1 day at 37°C in an aerobic atmosphere to produce this lot. Quality control testing was completed under propagation conditions unless otherwise noted.

**Lot: 70041122**

**Manufacturing Date: 08JAN2021**

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TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis</b> Cellular morphology Colony morphology  Growth at 44°C ± 2°C <sup>1</sup> 1 day in an aerobic atmosphere on Tryptic Soy agar Motility Remel™ Motility Test Medium w/TTC Indicator for 1 day at 37°C in an aerobic atmosphere VITEK® MS (MALDI-TOF)	Gram-negative rods Report results  Growth  Report results  <i>A. baumannii</i>	Gram-negative rods Circular, convex, entire, smooth and cream (Figure 1) Growth  Non-motile  <i>A. baumannii</i> (99.9%)
<b>Antibiotic Susceptibility Profile<sup>2,3</sup></b> Amikacin Ampicillin/sulbactam Cefepime Ceftriaxone Ceftazidime Ciprofloxacin Colistin Gentamicin Imipenem Levofloxacin Meropenem Trimethoprim/sulfamethoxazole Tobramycin Tetracycline	Intermediate Sensitive Sensitive Sensitive Sensitive Resistant Sensitive Resistant Sensitive Resistant Sensitive Resistant Sensitive Resistant Intermediate Resistant	Intermediate (32 µg/mL) Sensitive (3 µg/mL) Sensitive (4 to 8 µg/mL) Sensitive (8 µg/mL) Sensitive (4 µg/mL) Resistant (≥ 4 µg/mL) Sensitive (0.5 µg/mL) Resistant (≥ 256 µg/mL) Sensitive (≤ 2 µg/mL) Resistant (12 µg/mL) Sensitive (≤ 1 µg/mL) Resistant (> 4 µg/mL) Sensitive (4 µg/mL) <sup>4</sup> Resistant (> 256 µg/mL)
<b>Genotypic Analysis</b> Sequencing of 16S ribosomal RNA gene (~ 1480 base pairs)	≥ 99% sequence identity to <i>A. baumannii</i> , strain MRSN 16880 (GenBank: VHGO01000077.1)	100% sequence identity to <i>A. baumannii</i> , strain MRSN 16880 (GenBank: VHGO01000077.1)

TEST	SPECIFICATIONS	RESULTS
<b>Purity</b> 7 days at 37°C in an aerobic atmosphere with and without 5% CO <sub>2</sub> on Tryptic Soy agar	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology
<b>Viability</b>	Growth	Growth

<sup>1</sup>Growth at 44°C differentiates *A. baumannii* from *A. calcoaceticus* and *A. pittii*, which do not grow at 44°C.

<sup>2</sup>Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S28 (2018)

<sup>3</sup>Antibiotic susceptibility was tested using a combination of VITEK<sup>®</sup>2 GN82, Sensititre GNX2F AST and E-test strips.

<sup>4</sup>The susceptibility result for this antibiotic is within one doubling dilution of specification, which is considered an equivalent result.

Figure 1: Colony Morphology



/Heather Couch/

Heather Couch

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19 JAN 2022

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**Acinetobacter baumannii, Strain MRSN 17493**

**Catalog No. NR-52202**

This reagent is the tangible property of the U.S. Government.

**Product Description:**

*Acinetobacter baumannii* (*A. baumannii*), strain MRSN 17493 was isolated in 2013 from a human respiratory sample in the United States as part of a global surveillance program. *A. baumannii*, strain MRSN 17493 was deposited as resistant to amikacin, ampicillin/sulbactam, cefepime, ceftazidime, ceftriaxone, ciprofloxacin, colistin, gentamicin, imipenem, levofloxacin, meropenem, tetracycline, trimethoprim/sulfamethoxazole and tobramycin. NR-52202 was produced by inoculation of the deposited material into Tryptic Soy broth and grown for 1 day at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar kolles, which were grown for 1 day at 37°C in an aerobic atmosphere to produce this lot. Quality control testing was completed under propagation conditions unless otherwise noted.

**Lot: 70039047**

**Manufacturing Date: 23SEP2020**

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TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis</b> Cellular morphology Colony morphology  Growth at 44°C ± 2°C <sup>1</sup> 1 day in an aerobic atmosphere on Tryptic Soy agar  Motility BBL™ Motility Test Medium w/TTC Indicator for 1 day at 37°C in an aerobic atmosphere VITEK® MS (MALDI-TOF)	Gram-negative rods Report results  Growth  Report results  <i>A. baumannii</i>	Gram-negative rods Circular, convex, entire, smooth and cream (Figure 1) Growth  Non-motile  <i>A. baumannii</i> (99.9%)
<b>Antibiotic Susceptibility Profile<sup>2,3</sup></b> Amikacin Ampicillin/sulbactam Cefepime Ceftriaxone Ceftazidime Ciprofloxacin Colistin Gentamicin Imipenem Levofloxacin Meropenem Trimethoprim/sulfamethoxazole Tobramycin Tetracycline	Resistant Resistant Resistant Resistant Resistant Resistant Resistant Resistant Resistant Resistant Resistant Resistant Resistant Resistant Resistant	Resistant (≥ 256 µg/mL) Resistant (48 µg/mL) Resistant (64 µg/mL) Resistant (≥ 64 µg/mL) Resistant (≥ 64 µg/mL) Resistant (≥ 4 µg/mL) Resistant (> 4 µg/mL) Resistant (≥ 16 µg/mL) Resistant (> 8 µg/mL) Resistant (≥ 8 µg/mL) Resistant (> 8 µg/mL) Resistant (> 4 µg/mL) Resistant (≥ 16 µg/mL) Resistant (≥ 256 µg/mL)
<b>Genotypic Analysis</b> Sequencing of 16S ribosomal RNA gene (~ 1480 base pairs)	≥ 99% sequence identity to <i>A. baumannii</i> , strain MRSN 17493 (GenBank: VHGN01000093.1)	100% sequence identity to <i>A. baumannii</i> , strain MRSN 17493 (GenBank: VHGN01000093.1)
<b>Purity</b> 7 days at 37°C in an aerobic atmosphere with and without 5% CO <sub>2</sub> on Tryptic Soy agar	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology
<b>Viability</b>	Growth	Growth

<sup>1</sup>Growth at 44°C differentiates *A. baumannii* from *A. calcoaceticus* and *A. pittii*, which do not grow at 44°C.

<sup>2</sup>Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S28 (2018)

<sup>3</sup>Antibiotic susceptibility was tested using a combination of VITEK<sup>®</sup>2 GN82, Sensititre™ GNX2F AST and E-test strips.

**Figure 1: Colony Morphology**



/Heather Couch/  
Heather Couch

30 AUG 2021

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**Acinetobacter baumannii, Strain MRSN 19482**

**Catalog No. NR-52203**

This reagent is the tangible property of the U.S. Government.

**Product Description:**

*Acinetobacter baumannii* (*A. baumannii*), strain MRSN 19482 was isolated in 2013 from a human respiratory sample in South America as part of a global surveillance program. NR-52203 was deposited as sensitive to colistin, ampicillin/sulbactam and tetracycline and resistant to amikacin, cefepime, ceftazidime, ciprofloxacin, ceftriaxone, gentamicin, imipenem, levofloxacin, meropenem, tobramycin and trimethoprim/sulfamethoxazole. NR-52203 lot 70041124 was produced by inoculation of the deposited material into Tryptic Soy broth and grown for 1 day at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar kolles, which were grown for 1 day at 37°C in an aerobic atmosphere to produce this lot. Quality control testing was completed under propagation conditions unless otherwise noted.

**Lot: 70041124**

**Manufacturing Date: 08JAN2021**

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TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis</b> Cellular morphology Colony morphology  Growth at 44°C ± 2°C <sup>1</sup> 1 day in an aerobic atmosphere on Tryptic Soy agar  Motility Remel™ Motility Test Medium w/TTC Indicator for 1 day at 37°C in an aerobic atmosphere  VITEK® MS (MALDI-TOF)	Gram-negative rods Report results  Growth  Report results  <i>A. baumannii</i>	Gram-negative rods Circular, convex, entire, smooth and cream (Figure 1) Growth  Non-motile  <i>A. baumannii</i> (99.9%)
<b>Antibiotic Susceptibility Profile<sup>2,3</sup></b> Amikacin Ampicillin/sulbactam Cefepime Ceftriaxone Ceftazidime Ciprofloxacin Colistin Gentamicin Imipenem Levofloxacin Meropenem Trimethoprim/sulfamethoxazole Tobramycin Tetracycline	Resistant Sensitive Resistant Resistant Resistant Resistant Resistant Sensitive Resistant Resistant Resistant Resistant Resistant Resistant Resistant Sensitive	Resistant (> 256 µg/mL) Sensitive (6 µg/mL) Resistant (> 256 µg/mL) Resistant (> 32 µg/mL) Resistant (≥ 64 µg/mL) Resistant (≥ 4 µg/mL) Sensitive (≤ 0.5 µg/mL) Sensitive (4 µg/mL) <sup>4</sup> Resistant (> 8 µg/mL) Resistant (8 µg/mL) Resistant (> 8 µg/mL) Resistant (> 4 µg/mL) Resistant (≥ 16 µg/mL) Resistant (≥ 256 µg/mL) <sup>5</sup>
<b>Genotypic Analysis</b> Sequencing of 16S ribosomal RNA gene (~ 1480 base pairs)	≥ 99% sequence identity to <i>A. baumannii</i> , strain MRSN 19482 (GenBank: VHGM01000083.1)	99.9% sequence identity to <i>A. baumannii</i> , strain MRSN 19482 (GenBank: VHGM01000083.1)
<b>Purity</b> 7 days at 37°C in an aerobic atmosphere with and without 5% CO <sub>2</sub> on Tryptic Soy agar	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology



TEST	SPECIFICATIONS	RESULTS
Viability	Growth	Growth

<sup>1</sup>Growth at 44°C differentiates *A. baumannii* from *A. calcoaceticus* and *A. pittii*, which do not grow at 44°C.

<sup>2</sup>Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S28 (2018)

<sup>3</sup>Antibiotic susceptibility was tested using a combination of VITEK<sup>®</sup>2 GN82, Sensititre GNX2F AST and E-test strips.

<sup>4</sup>*A. baumannii*, strain MRSN 19482 was deposited as resistant to gentamicin, but showed a MIC of 4 µg/mL (interpreted as sensitive) for this antibiotic during QC testing. Testing was performed in duplicate.

<sup>5</sup>*A. baumannii*, strain MRSN 19482 was deposited as sensitive to tetracycline, but showed a MIC of > 256 µg/mL (interpreted as resistant) for this antibiotic during QC testing. Testing was performed in duplicate.

Figure 1: Colony Morphology



/Heather Couch/

Heather Couch

28 MAY 2021

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**Acinetobacter baumannii, Strain MRSN 21660**

**Catalog No. NR-52204**

This reagent is the tangible property of the U.S. Government.

**Product Description:**

*Acinetobacter baumannii* (*A. baumannii*), strain MRSN 21660 was isolated in 2013 from a human wound in Central America as part of a global surveillance program. *A. baumannii*, strain MRSN 21660 was deposited as sensitive to colistin and resistant to amikacin, ceftazidime, ciprofloxacin, ceftriaxone, cefepime, gentamicin, imipenem, trimethoprim/sulfamethoxazole, levofloxacin, meropenem, tobramycin, tetracycline and ampicillin/sulbactam. NR-52204 lot 70038242 was produced by inoculation of the deposited material into Tryptic Soy broth and grown for 1 day at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar kolles, which were grown for 1 day at 37°C in an aerobic atmosphere to produce this lot. Quality control testing was completed under propagation conditions unless otherwise noted.

**Lot: 70038242**

**Manufacturing Date: 20AUG2020**

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TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis</b> Cellular morphology Colony morphology  Growth at 44°C ± 2°C <sup>1</sup> 1 day in an aerobic atmosphere on Tryptic Soy agar Motility BBL™ Motility Test Medium w/TTC Indicator for 1 day at 37°C in an aerobic atmosphere VITEK®2 GN VITEK® MS (MALDI-TOF)	Gram-negative rods Report results  Growth  Report results  <i>A. baumannii</i> (≥ 89%) <i>A. baumannii</i>	Gram-negative rods Circular, convex, entire, smooth and cream (Figure 1) Growth  Non-motile  <i>A. baumannii</i> (99%) <i>A. baumannii</i> (99.9%)
<b>Antibiotic Susceptibility Profile<sup>2,3</sup></b> Amikacin Ampicillin/sulbactam Cefepime Ceftriaxone Ceftazidime Ciprofloxacin Colistin Gentamicin Imipenem Levofloxacin Meropenem Trimethoprim/sulfamethoxazole Tobramycin Tetracycline	Resistant Resistant Resistant Resistant Resistant Resistant Resistant Sensitive Resistant Resistant Resistant Resistant Resistant Resistant Resistant Resistant	Resistant (> 256 µg/mL) Resistant (32 µg/mL) Resistant (> 256 µg/mL) Resistant (≥ 64 µg/mL) Resistant (≥ 64 µg/mL) Resistant (≥ 4 µg/mL) Sensitive (≤ 0.5 µg/mL) Resistant (≥ 16 µg/mL) Resistant (> 8 µg/mL) Resistant (32 µg/mL) Resistant (> 8 µg/mL) Resistant (> 4 µg/mL) Resistant (≥ 16 µg/mL) Resistant (≥ 256 µg/mL)
<b>Genotypic Analysis</b> Sequencing of 16S ribosomal RNA gene (~ 980 base pairs)	≥ 99% sequence identity to <i>A. baumannii</i> , strain MRSN 21660 (GenBank: VHGL01000086.1)	100% sequence identity to <i>A. baumannii</i> , strain MRSN 21660 (GenBank: VHGL01000086.1)

TEST	SPECIFICATIONS	RESULTS
(~ 500 base pairs)	≥ 99% sequence identity to <i>A. baumannii</i> , strain MRSN 21660 (GenBank: VHGL01000087.1)	100% sequence identity to <i>A. baumannii</i> , strain MRSN 21660 (GenBank: VHGL01000087.1)
<b>Purity</b> 7 days at 37°C in an aerobic atmosphere with and without 5% CO <sub>2</sub> on Tryptic Soy agar	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology
<b>Viability</b>	Growth	Growth

<sup>1</sup>Growth at 44°C differentiates *A. baumannii* from *A. calcoaceticus* and *A. pittii*, which do not grow at 44°C.

<sup>2</sup>Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S28 (2018)

<sup>3</sup>Antibiotic susceptibility was tested using a combination of VITEK®2 GN82, Sensititre GNX2F AST and E-test strips.

Figure 1: Colony Morphology



/Heather Couch/  
Heather Couch

26 APR 2021

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**Acinetobacter baumannii, Strain MRSN 21681**

**Catalog No. NR-52205**

This reagent is the tangible property of the U.S. Government.

**Product Description:**

*Acinetobacter baumannii* (*A. baumannii*), strain MRSN 21681 was isolated in 2013 from a human catheter sample in Central America as part of a global surveillance program. *A. baumannii*, strain MRSN 21681 was deposited as sensitive to colistin and resistant to amikacin, ceftazidime, ciprofloxacin, ceftriaxone, cefepime, gentamicin, imipenem, trimethoprim/sulfamethoxazole, levofloxacin, meropenem, tobramycin, tetracycline and ampicillin/sulbactam. NR-52205 lot 70038243 was produced by inoculation of the deposited material into Tryptic Soy broth and grown for 1 day at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar kolles, which were grown for 1 day at 37°C in an aerobic atmosphere to produce this lot. Quality control testing was completed under propagation conditions unless otherwise noted.

**Lot: 70038243**

**Manufacturing Date: 20AUG2020**

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TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis</b> Cellular morphology Colony morphology  Growth at 44°C ± 2°C <sup>1</sup> 1 day in an aerobic atmosphere on Tryptic Soy agar Motility BBL™ Motility Test Medium w/TTC Indicator for 1 day at 37°C in an aerobic atmosphere VITEK® MS (MALDI-TOF)	Gram-negative rods Report results  Growth  Report results  <i>A. baumannii</i>	Gram-negative rods Circular, convex, entire, smooth and cream (Figure 1) Growth  Non-motile  <i>A. baumannii</i> (99.9%)
<b>Antibiotic Susceptibility Profile<sup>2,3</sup></b> Amikacin Ampicillin/sulbactam Cefepime Ceftriaxone Ceftazidime Ciprofloxacin Colistin Gentamicin Imipenem Levofloxacin Meropenem Trimethoprim/sulfamethoxazole Tobramycin Tetracycline	Resistant Resistant Resistant Resistant Resistant Resistant Resistant Sensitive Resistant Resistant Resistant Resistant Resistant Resistant Resistant	Resistant (> 256 µg/mL) Resistant (128 to 256 µg/mL) Resistant (> 256 µg/mL) Resistant (≥ 64 µg/mL) Resistant (≥ 64 µg/mL) Resistant (≥ 4 µg/mL) Sensitive (≤ 0.25 µg/mL) Resistant (≥ 16 µg/mL) Resistant (> 8 µg/mL) Resistant (8 µg/mL) Resistant (> 8 µg/mL) Resistant (> 4 µg/mL) Resistant (≥ 16 µg/mL) Resistant (256 µg/mL)
<b>Genotypic Analysis</b> Sequencing of 16S ribosomal RNA gene (~ 1480 base pairs)	≥ 99% sequence identity to <i>A. baumannii</i> , strain MRSN 21681 (GenBank: VHGK01000126.1)	99.8% sequence identity to <i>A. baumannii</i> , strain MRSN 21681 (GenBank: VHGK01000126.1)
<b>Purity</b> 7 days at 37°C in an aerobic atmosphere with and without 5% CO <sub>2</sub> on Tryptic Soy agar	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology

TEST	SPECIFICATIONS	RESULTS
Viability	Growth	Growth

<sup>1</sup>Growth at 44°C differentiates *A. baumannii* from *A. calcoaceticus* and *A. pittii*, which do not grow at 44°C.

<sup>2</sup>Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S28 (2018)

<sup>3</sup>Antibiotic susceptibility was tested using a combination of VITEK<sup>®</sup> 2 GN82, Sensititre™ GNX2F AST and E-test strips.

Figure 1: Colony Morphology



/Heather Couch/  
Heather Couch

19 APR 2021

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**Acinetobacter baumannii, Strain MRSN 22112**

**Catalog No. NR-52206**

This reagent is the tangible property of the U.S. Government.

**Product Description:**

*Acinetobacter baumannii* (*A. baumannii*), strain MRSN 22112 was isolated in 2013 from a human blood sample in South America as part of a global surveillance program. *A. baumannii*, strain MRSN 22112 was deposited as sensitive to ampicillin/sulbactam, ciprofloxacin, colistin and levofloxacin, intermediately resistant to amikacin and tobramycin, and resistant to ceftazidime, ceftriaxone, cefepime, gentamicin, imipenem, tetracycline, meropenem and trimethoprim/sulfamethoxazole. NR-52206 lot 70038239 was produced by inoculation of the deposited material into Tryptic Soy broth and grown for 1 day at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar kolles, which were grown for 1 day at 37°C in an aerobic atmosphere to produce this lot. Quality control testing was completed under propagation conditions unless otherwise noted.

**Lot: 70038239**

**Manufacturing Date: 19AUG2020**

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TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis</b> Cellular morphology Colony morphology  Growth at 44°C ± 2°C <sup>1</sup> 1 day in an aerobic atmosphere on Tryptic Soy agar Motility BBL™ Motility Test Medium w/TTC Indicator for 1 day at 37°C in an aerobic atmosphere VITEK® GN card VITEK® MS (MALDI-TOF)	Gram-negative rods Report results  Growth  Report results  <i>A. baumannii</i> (≥ 89%) <i>A. baumannii</i>	Gram-negative rods Circular, convex, entire, smooth and cream (Figure 1) Growth  Non-motile  <i>A. baumannii</i> (99%) <i>A. baumannii</i> (99.9%)
<b>Antibiotic Susceptibility Profile<sup>2,3</sup></b> Amikacin Ampicillin/sulbactam Cefepime Ceftriaxone Ceftazidime Ciprofloxacin Colistin Gentamicin Imipenem Levofloxacin Meropenem Trimethoprim/sulfamethoxazole Tobramycin Tetracycline	Intermediate Sensitive Resistant Resistant Resistant Sensitive Sensitive Resistant Resistant Sensitive Resistant Resistant Resistant Intermediate Resistant	Resistant (256 µg/mL) <sup>4</sup> Sensitive (8 µg/mL) Resistant (64 µg/mL) Resistant (≥ 64 µg/mL) Resistant (≥ 64 µg/mL) Sensitive (≤ 0.25 µg/mL) Sensitive (≤ 0.5 µg/mL) Resistant (48 µg/mL) Resistant (12 µg/mL) Sensitive (≤ 1 µg/mL) Resistant (8 µg/mL) Resistant (> 4 µg/mL) Intermediate (8 µg/mL) Resistant (≥ 64 µg/mL)
<b>Genotypic Analysis</b> Sequencing of 16S ribosomal RNA gene (~ 1480 base pairs)	≥ 99% sequence identity to <i>A. baumannii</i> , strain MRSN 22112 (GenBank: VHGJ01000149.1)	99.9% sequence identity to <i>A. baumannii</i> , strain MRSN 22112 (GenBank: VHGJ01000149.1)

TEST	SPECIFICATIONS	RESULTS
<b>Purity</b> 8 days at 37°C in an aerobic atmosphere with and without 5% CO <sub>2</sub> on Tryptic Soy agar	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology
<b>Viability</b>	Growth	Growth

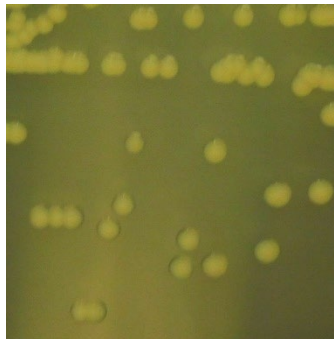
<sup>1</sup>Growth at 44°C differentiates *A. baumannii* from *A. calcoaceticus* and *A. pittii*, which do not grow at 44°C.

<sup>2</sup>Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S28 (2018)

<sup>3</sup>Antibiotic susceptibility was tested using a combination of VITEK® 2 GN82, Sensititre GNX2F AST and E-test strips.

<sup>4</sup>*A. baumannii*, strain MRSN 22112 was deposited as intermediate to amikacin, but showed a MIC of 256 µg per mL (interpreted as resistant) for amikacin during QC testing. Testing was performed in duplicate.

Figure 1: Colony Morphology



/Heather Couch/  
Heather Couch

28 APR 2021

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**Acinetobacter baumannii, Strain MRSN 23390**

**Catalog No. NR-52207**

This reagent is the tangible property of the U.S. Government.

**Product Description:**

*Acinetobacter baumannii* (*A. baumannii*), strain MRSN 23390 was isolated in 2014 from an intravenous line in Asia as part of a global surveillance program. NR-52207 was deposited as multi-locus sequence type (MLST) ST 15, sensitive to colistin, cefepime, imipenem, meropenem, ampicillin/sulbactam and tetracycline and resistant to amikacin, ceftazidime, ciprofloxacin, ceftriaxone, gentamicin, levofloxacin, tobramycin and trimethoprim/sulfamethoxazole. NR-52207 was produced by inoculation of the deposited material into Tryptic Soy broth and grown for 1 day at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar kolles, which were grown for 1 day at 37°C in an aerobic atmosphere to produce this lot. Quality control testing was completed under propagation conditions unless otherwise noted.

**Lot: 70041126**

**Manufacturing Date: 08JAN2021**

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TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis</b> Cellular morphology Colony morphology  Growth at 44°C ± 2°C <sup>1</sup> 1 day in an aerobic atmosphere on Tryptic Soy agar  Motility BBL™ Motility Test Medium w/TTC Indicator for 1 day at 37°C in an aerobic atmosphere  VITEK® MS (MALDI-TOF)	Gram-negative rods Report results  Growth  Report results  <i>A. baumannii</i>	Gram-negative rods Circular, convex, entire, smooth and cream (Figure 1) Growth  Non-motile  <i>A. baumannii</i> (99.9%)
<b>Antibiotic Susceptibility Profile<sup>2,3</sup></b> Amikacin Ampicillin/sulbactam Cefepime Ceftriaxone Ceftazidime Ciprofloxacin Colistin Gentamicin Imipenem Levofloxacin Meropenem Trimethoprim/sulfamethoxazole Tobramycin Tetracycline	Resistant Sensitive Sensitive Resistant Resistant Resistant Resistant Sensitive Resistant Sensitive Resistant Sensitive Resistant Resistant Sensitive	Resistant (> 256 µg/mL) Sensitive (2 µg/mL) Sensitive (8 µg/mL) Resistant (≥ 64 µg/mL) Resistant (≥ 32 µg/mL) Resistant (≥ 4 µg/mL) Sensitive (≤ 0.25 µg/mL) Resistant (≥ 16 µg/mL) Sensitive (≤ 1 µg/mL) Resistant (> 32 µg/mL) Sensitive (≤ 1 µg/mL) Resistant (> 4 µg/mL) Resistant (> 256 µg/mL) Resistant (16 µg/mL) <sup>4</sup>
<b>Genotypic Analysis</b> Sequencing of 16S ribosomal RNA gene (~ 1480 base pairs)	≥ 99% sequence identity to <i>A. baumannii</i> , strain MRSN 23390 (GenBank: VHG101000070.1)	99.8% sequence identity to <i>A. baumannii</i> , strain MRSN 23390 (GenBank: VHG101000070.1)
<b>Purity</b> 7 days at 37°C in an aerobic atmosphere with and without 5% CO <sub>2</sub> on Tryptic Soy agar	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology



TEST	SPECIFICATIONS	RESULTS
Viability	Growth	Growth

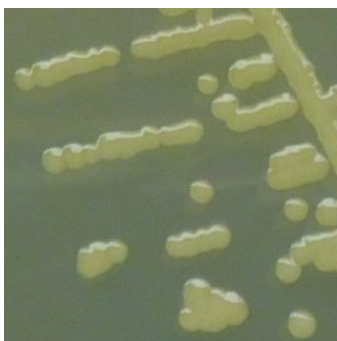
<sup>1</sup>Growth at 44°C differentiates *A. baumannii* from *A. calcoaceticus* and *A. pittii*, which do not grow at 44°C.

<sup>2</sup>Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S28 (2018)

<sup>3</sup>Antibiotic susceptibility was tested using a combination of VITEK<sup>®</sup>2 GN82, Sensititre GNX2F AST and E-test strips.

<sup>4</sup>*A. baumannii*, strain MRSN 23390 was deposited as sensitive to tetracycline, but showed a MIC of 16 µg/mL (interpreted as resistant) for tetracycline during QC testing. Testing was performed in duplicate.

Figure 1: Colony Morphology



/Heather Couch/  
Heather Couch

01 JUN 2021

Program Manager or designee, ATCC Federal Solutions

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**Acinetobacter baumannii, Strain MRSN 24008**

**Catalog No. NR-52208**

This reagent is the tangible property of the U.S. Government.

**Product Description:**

*Acinetobacter baumannii* (*A. baumannii*), strain MRSN 24008 was isolated in 2014 in the USA as part of a global surveillance program. *A. baumannii*, strain MRSN 24008 was deposited as multi-locus sequence type (MLST) ST 2, sensitive to amikacin, ampicillin/sulbactam, colistin, imipenem, meropenem and tobramycin and resistant to cefepime, ceftazidime, ceftriaxone, ciprofloxacin, gentamicin, levofloxacin, tetracycline and trimethoprim/sulfamethoxazole. NR-52208 lot 70041128 was produced by inoculation of the deposited material into Tryptic Soy broth and grown for 1 day at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar kolles, which were grown for 1 day at 37°C in an aerobic atmosphere to produce this lot. Quality control testing was completed under propagation conditions unless otherwise noted.

**Lot: 70041128**

**Manufacturing Date: 08JAN2021**

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TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis</b> Cellular morphology Colony morphology  Growth at 44°C ± 2°C <sup>1</sup> 1 day in an aerobic atmosphere on Tryptic Soy agar Motility Remel™ Motility Test Medium w/TTC Indicator for 1 day at 37°C in an aerobic atmosphere VITEK® MS (MALDI-TOF)	Gram-negative rods Report results  Growth  Report results  <i>A. baumannii</i>	Gram-negative rods Circular, convex, entire, smooth and cream (Figure 1) Growth  Motile  <i>A. baumannii</i> (99.9%)
<b>Antibiotic Susceptibility Profile<sup>2,3</sup></b> Amikacin Ampicillin/sulbactam Cefepime Ceftriaxone Ceftazidime Ciprofloxacin Colistin Gentamicin Imipenem Levofloxacin Meropenem Trimethoprim/sulfamethoxazole Tobramycin Tetracycline	Sensitive Sensitive Resistant Resistant Resistant Resistant Sensitive Resistant Sensitive Resistant Sensitive Resistant Sensitive Resistant	Sensitive (≤ 8 µg/mL) Sensitive (8 µg/mL) Resistant (128 µg/mL) Resistant (> 32 µg/mL) Resistant (≥ 64 µg/mL) Resistant (≥ 4 µg/mL) Sensitive (0.125 µg/mL) Resistant (12 to 16 µg/mL) Sensitive (≤ 2 µg/mL) Resistant (8 µg/mL) Sensitive (1 µg/mL) Resistant (> 4 µg/mL) Sensitive (2 µg/mL) Resistant (> 256 µg/mL)
<b>Genotypic Analysis</b> Sequencing of 16S ribosomal RNA gene (1480 base pairs)	≥ 99% sequence identity to <i>A. baumannii</i> , strain MRSN 24008 (GenBank: VGHG01000058.1)	100% sequence identity to <i>A. baumannii</i> , strain MRSN 24008 (GenBank: VGHG01000058.1)

TEST	SPECIFICATIONS	RESULTS
<b>Purity</b> 7 days at 37°C in an aerobic atmosphere with and without 5% CO <sub>2</sub> on Tryptic Soy agar	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology
<b>Viability</b>	Growth	Growth

<sup>1</sup>Growth at 44°C differentiates *A. baumannii* from *A. calcoaceticus* and *A. pittii*, which do not grow at 44°C.

<sup>2</sup>Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S28 (2018)

<sup>3</sup>Antibiotic susceptibility was tested using a combination of VITEK<sup>®</sup>2 GN82, Sensititre GNX2F AST and E-test strips.

Figure 1: Colony Morphology



/Heather Couch/  
Heather Couch

27 DEC 2021

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**Acinetobacter baumannii, Strain MRSN 24603**

**Catalog No. NR-52209**

This reagent is the tangible property of the U.S. Government.

**Product Description:**

*Acinetobacter baumannii* (*A. baumannii*), strain MRSN 24603 was isolated in 2014 from human blood in Europe as part of a global surveillance program. NR-52209 was deposited as multi-locus sequence type (MLST) ST 428, sensitive to amikacin, ampicillin/sulbactam, cefepime, ceftazidime, ciprofloxacin, ceftriaxone, colistin, gentamicin, imipenem, levofloxacin, meropenem, tobramycin, tetracycline and trimethoprim/sulfamethoxazole. NR-52209 lot 70042468 was produced by inoculation of the deposited material into Tryptic Soy broth and grown for 1 day at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar kolles, which were grown for 1 day at 37°C in an aerobic atmosphere to produce this lot. Quality control testing was completed under propagation conditions unless otherwise noted.

**Lot: 70042468**

**Manufacturing Date: 26FEB2021**

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TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis</b> Cellular morphology Colony morphology  Growth at 44°C ± 2°C <sup>1</sup> 1 day in an aerobic atmosphere on Tryptic Soy agar  Motility BBL™ Motility Test Medium w/TTC Indicator for 1 day at 37°C in an aerobic atmosphere  VITEK® MS (MALDI-TOF)	Gram-negative rods Report results  Growth  Report results  <i>A. baumannii</i>	Gram-negative rods Circular, convex, entire, smooth and cream (Figure 1) Growth  Motile  <i>A. baumannii</i> (99.9%)
<b>Antibiotic Susceptibility Profile<sup>2,3</sup></b> Amikacin Ampicillin/sulbactam Cefepime Ceftriaxone Ceftazidime Ciprofloxacin Colistin Gentamicin Imipenem Levofloxacin Meropenem Trimethoprim/sulfamethoxazole Tobramycin Tetracycline	Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive	Sensitive (4 to 6 µg/mL) Sensitive (0.85 µg/mL) Sensitive (1.5 µg/mL) Inconclusive (8 to 16 µg/mL) <sup>4</sup> Sensitive (4 µg/mL) Sensitive (≤ 0.25 µg/mL) Sensitive (≤ 0.25 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 0.5 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (4 µg/mL)
<b>Genotypic Analysis</b> Sequencing of 16S ribosomal RNA gene (~ 1470 base pairs)	≥ 99% sequence identity to <i>A. baumannii</i> , strain MRSN 24603 (GenBank: VHGG01000121.1)	100% sequence identity to <i>A. baumannii</i> , strain MRSN 24603 (GenBank: VHGG01000121.1)
<b>Purity</b> 7 days at 37°C in an aerobic atmosphere with and without 5% CO <sub>2</sub> on Tryptic Soy agar	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology

TEST	SPECIFICATIONS	RESULTS
Viability	Growth	Growth

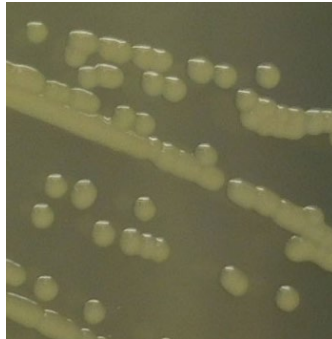
<sup>1</sup>Growth at 44°C differentiates *A. baumannii* from *A. calcoaceticus* and *A. pittii*, which do not grow at 44°C.

<sup>2</sup>Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S28 (2018)

<sup>3</sup>Antibiotic susceptibility was tested using a combination of VITEK<sup>®</sup>2 GN82, Sensititre GNX2F AST and E-test strips.

<sup>4</sup>*A. baumannii* strain MRSN 24603 was deposited as being sensitive to ceftriaxone. Repeated antibiotic susceptibility testing determined that for strain MRSN 24603, the ceftriaxone MICs are 8 µg per mL and 16 µg per mL, which are interpreted as sensitive and intermediately resistant, respectively. Testing was performed in duplicate.

Figure 1: Colony Morphology



/Heather Couch/  
Heather Couch

11 OCT 2021

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**Acinetobacter baumannii, Strain MRSN 25547**

**Catalog No. NR-52210**

This reagent is the tangible property of the U.S. Government.

**Product Description:**

*Acinetobacter baumannii* (*A. baumannii*), strain MRSN 25547 was isolated in 2014 from a human wound in Europe as part of a global surveillance program. *A. baumannii*, strain MRSN 25547 was deposited as sensitive to colistin and resistant to amikacin, ceftazidime, ciprofloxacin, ceftriaxone, cefepime, gentamicin, imipenem, trimethoprim/sulfamethoxazole, levofloxacin, meropenem, tobramycin, tetracycline and ampicillin/sulbactam. NR-52210 lot 70039049 was produced by inoculation of the deposited material into Tryptic Soy broth and grown for 1 day at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar kolles, which were grown for 1 day at 37°C in an aerobic atmosphere to produce this lot. Quality control testing was completed under propagation conditions unless otherwise noted.

**Lot: 70039049**

**Manufacturing Date: 11SEP2020**

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TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis</b> Cellular morphology Colony morphology  Growth at 44°C ± 2°C <sup>1</sup> 1 day in an aerobic atmosphere on Tryptic Soy agar  Motility Remel™ Motility Test Medium w/TTC Indicator for 1 day at 37°C in an aerobic atmosphere  VITEK® MS (MALDI-TOF)	Gram-negative rods Report results  Growth  Report results  <i>A. baumannii</i>	Gram-negative rods Circular, convex, entire, smooth and cream (Figure 1) Growth  Non-motile  <i>A. baumannii</i> (99.9%)
<b>Antibiotic Susceptibility Profile<sup>2,3</sup></b> Amikacin Ampicillin/sulbactam Cefepime Ceftriaxone Ceftazidime Ciprofloxacin Colistin Gentamicin Imipenem Levofloxacin Meropenem Trimethoprim/sulfamethoxazole Tobramycin Tetracycline	Resistant Resistant Resistant Resistant Resistant Resistant Sensitive Resistant Resistant Resistant Resistant Resistant Resistant Resistant Resistant Resistant	Resistant (> 256 µg/mL) Resistant (48 µg/mL) Resistant (> 256 µg/mL) Resistant (≥ 64 µg/mL) Resistant (≥ 64 µg/mL) Resistant (≥ 4 µg/mL) Sensitive (≤ 0.25 µg/mL) Resistant (≥ 16 µg/mL) Resistant (> 8 µg/mL) Resistant (> 8 µg/mL) Resistant (> 8 µg/mL) Resistant (> 4 µg/mL) Resistant (≥ 16 µg/mL) Resistant (256 µg/mL)
<b>Genotypic Analysis</b> Sequencing of 16S ribosomal RNA gene (~ 1260 base pairs)	≥ 99% sequence identity to <i>A. baumannii</i> , strain MRSN 25547 (GenBank: VHGf01000110.1)	99.9% sequence identity to <i>A. baumannii</i> , strain MRSN 25547 (GenBank: VHGf01000110.1)

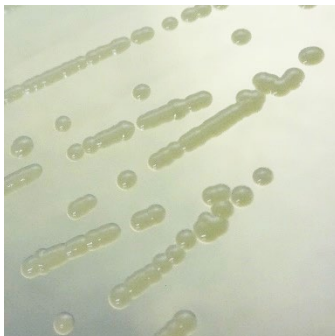
TEST	SPECIFICATIONS	RESULTS
<b>Purity</b> 7 days at 37°C in an aerobic atmosphere with and without 5% CO <sub>2</sub> on Tryptic Soy agar	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology
<b>Viability</b>	Growth	Growth

<sup>1</sup>Growth at 44°C differentiates *A. baumannii* from *A. calcoaceticus* and *A. pittii*, which do not grow at 44°C.

<sup>2</sup>Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S28 (2018)

<sup>3</sup>Antibiotic susceptibility was tested using a combination of VITEK<sup>®</sup>2 GN82, Sensititre™ GNX2F AST and E-test strips.

Figure 1: Colony Morphology



/Heather Couch/

Heather Couch

Program Manager or designee, ATCC Federal Solutions

23 JUN 2021

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**Acinetobacter baumannii, Strain MRSN 29908**

**Catalog No. NR-52211**

This reagent is the tangible property of the U.S. Government.

**Product Description:**

*Acinetobacter baumannii* (*A. baumannii*), strain MRSN 29908 was isolated in 2015 from a human sample in the United States as part of a global surveillance program. *A. baumannii*, strain MRSN 29908 was deposited as sensitive to ceftazidime and colistin, intermediately resistant to ceftriaxone and resistant to amikacin, ampicillin/sulbactam, cefepime, ciprofloxacin, gentamicin, imipenem, levofloxacin, meropenem, tetracycline, trimethoprim/sulfamethoxazole and tobramycin. NR-52211 lot 70039051 was produced by inoculation of the deposited material into Tryptic Soy broth and grown for 1 day at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar kolles, which were grown for 1 day at 37°C in an aerobic atmosphere to produce this lot. Quality control testing was completed under propagation conditions unless otherwise noted.

**Lot: 70039051**

**Manufacturing Date: 11SEP2020**

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TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis</b> Cellular morphology Colony morphology  Growth at 44°C ± 2°C <sup>1</sup> 1 day in an aerobic atmosphere on Tryptic Soy agar Motility Remel™ Motility Test Medium w/TTC Indicator for 1 day at 37°C in an aerobic atmosphere VITEK® MS (MALDI-TOF)	Gram-negative rods Report results  Growth  Report results  <i>A. baumannii</i>	Gram-negative rods Circular, convex, entire, smooth and cream (Figure 1) Growth  Non-motile  <i>A. baumannii</i> (99.9%)
<b>Antibiotic Susceptibility Profile<sup>2,3</sup></b> Amikacin Ampicillin/sulbactam Cefepime Ceftriaxone Ceftazidime Ciprofloxacin Colistin Gentamicin Imipenem Levofloxacin Meropenem Trimethoprim/sulfamethoxazole Tobramycin Tetracycline	Resistant Resistant Resistant Intermediate Sensitive Resistant Sensitive Resistant Resistant Resistant Resistant Resistant Resistant Resistant Resistant Resistant	Resistant (> 256 µg/mL) Resistant (48 to 64 µg/mL) Resistant (48 to 64 µg/mL) Intermediate (32 µg/mL) Resistant (64 µg/mL) <sup>4</sup> Resistant (≥ 4 µg/mL) Sensitive (≤ 0.25 µg/mL) Resistant (≥ 16 µg/mL) Resistant (> 8 µg/mL) Resistant (> 8 µg/mL) Resistant (> 8 µg/mL) Resistant (> 4 µg/mL) Resistant (≥ 16 µg/mL) Resistant (> 256 µg/mL)
<b>Genotypic Analysis</b> Sequencing of 16S ribosomal RNA gene (~ 1480 base pairs)	≥ 99% sequence identity to <i>A. baumannii</i> , strain MRSN 29908 (GenBank: VHGD01000064.1)	99.9% sequence identity to <i>A. baumannii</i> , strain MRSN 29908 (GenBank: VHGD01000064.1)
<b>Purity</b> 7 days at 37°C in an aerobic atmosphere with and without 5% CO <sub>2</sub> on Tryptic Soy agar	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology



TEST	SPECIFICATIONS	RESULTS
Viability	Growth	Growth

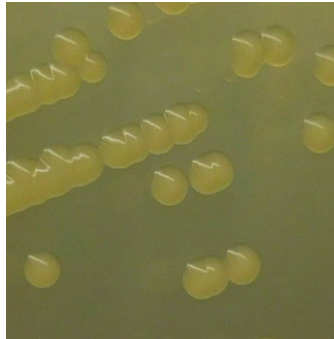
<sup>1</sup>Growth at 44°C differentiates *A. baumannii* from *A. calcoaceticus* and *A. pittii*, which do not grow at 44°C.

<sup>2</sup>Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S28 (2018)

<sup>3</sup>Antibiotic susceptibility was tested using a combination of VITEK<sup>®</sup>2 GN82, Sensititre GNX2F AST and E-test strips.

<sup>4</sup>*A. baumannii*, strain MRSN 29908 was deposited as being sensitive to ceftazidime. Repeated antibiotic susceptibility testing determined that for strain MRSN 29908, the ceftazidime MIC is 64 µg per mL, which is interpreted as resistant. Testing was performed in duplicate.

Figure 1: Colony Morphology



/Heather Couch/  
Heather Couch

22 JAN 2022

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**Acinetobacter baumannii, Strain MRSN 29999**

**Catalog No. NR-52212**

This reagent is the tangible property of the U.S. Government.

**Product Description:**

*Acinetobacter baumannii* (*A. baumannii*), strain MRSN 29999 was isolated in 2009 from a human respiratory sample in Europe as part of a global surveillance program. *A. baumannii*, strain MRSN 29999 was deposited as sensitive to amikacin, ampicillin/sulbactam, cefepime, ceftazidime, ceftriaxone, ciprofloxacin, colistin, gentamicin, imipenem, levofloxacin, meropenem, tetracycline, tobramycin and trimethoprim/sulfamethoxazole. NR-52212 lot 70042479 was produced by inoculation of the deposited material into Tryptic Soy broth and grown for 1 day at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar kolles, which were grown for 1 day at 37°C in an aerobic atmosphere to produce this lot. Quality control testing was completed under propagation conditions unless otherwise noted.

**Lot: 70042474**

**Manufacturing Date: 10MAR2021**

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TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis</b> Cellular morphology Colony morphology  Growth at 44°C ± 2°C <sup>1</sup> 1 day in an aerobic atmosphere on Tryptic Soy agar  Motility BBL™ Motility Test Medium w/TTC Indicator for 1 day at 37°C in an aerobic atmosphere  VITEK® MS (MALDI-TOF)	Gram-negative rods Report results  Growth  Report results  <i>A. baumannii</i>	Gram-negative rods Circular, convex, entire, smooth and cream Growth  Non-motile  <i>A. baumannii</i> (99.9%)
<b>Antibiotic Susceptibility Profile<sup>2,3</sup></b> Amikacin Ampicillin/sulbactam Cefepime Ceftriaxone Ceftazidime Ciprofloxacin Colistin Gentamicin Imipenem Levofloxacin Meropenem Trimethoprim/sulfamethoxazole Tobramycin Tetracycline	Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive	Sensitive (12 µg/mL) Sensitive (1.5 µg/mL) Sensitive (2 µg/mL) Sensitive (8 µg/mL) Sensitive (4 µg/mL) Sensitive (≤ 0.25 µg/mL) Sensitive (≤ 0.25 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 0.5 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (2 to 3 µg/mL)
<b>Genotypic Analysis</b> Sequencing of 16S ribosomal RNA gene (~1470 base pairs)	≥ 99% sequence identity to <i>A. baumannii</i> , strain MRSN 29999 (GenBank: VHGC01000093.1)	99.9% sequence identity to <i>A. baumannii</i> , strain MRSN 29999 (GenBank: VHGC01000093.1)
<b>Purity</b> 7 days at 37°C in an aerobic atmosphere with and without 5% CO <sub>2</sub> on Tryptic Soy agar	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology

TEST	SPECIFICATIONS	RESULTS
Viability	Growth	Growth

<sup>1</sup>Growth at 44°C differentiates *A. baumannii* from *A. calcoaceticus* and *A. pittii*, which do not grow at 44°C.

<sup>2</sup>Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S28 (2018)

<sup>3</sup>Antibiotic susceptibility was tested using a combination of VITEK<sup>®</sup>2 GN82, Sensititre GNX2F AST and E-test strips.

/Heather Couch/

Heather Couch

05 FEB 2022

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**Acinetobacter baumannii, Strain MRSN 30000**

**Catalog No. NR-52213**

This reagent is the tangible property of the U.S. Government.

**Product Description:**

*Acinetobacter baumannii* (*A. baumannii*), strain MRSN 30000 was isolated in 2009 from a human in Europe as part of a global surveillance program. NR-52213 was deposited as sensitive to colistin, imipenem, meropenem and ampicillin/sulbactam and resistant to amikacin, cefepime, ceftazidime, ceftriaxone, ciprofloxacin, gentamicin, levofloxacin, tobramycin, trimethoprim/sulfamethoxazole and tetracycline. NR-52213 was produced by inoculation of the deposited material into Tryptic Soy broth and grown for 1 day at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar kolles, which were grown for 1 day at 37°C in an aerobic atmosphere to produce this lot. Quality control testing was completed under propagation conditions unless otherwise noted.

**Lot: 70041130**

**Manufacturing Date: 30DEC2020**

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TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis</b> Cellular morphology Colony morphology  Growth at 44°C ± 2°C <sup>1</sup> 1 day in an aerobic atmosphere on Tryptic Soy agar Motility Remel™ Motility Test Medium w/TTC Indicator for 1 day at 37°C in an aerobic atmosphere VITEK® MS (MALDI-TOF)	Gram-negative rods Report results  Growth  Report results  <i>A. baumannii</i>	Gram-negative rods Circular, convex, entire, smooth and cream (Figure 1) Growth  Motile  <i>A. baumannii</i> (99.9%)
<b>Antibiotic Susceptibility Profile<sup>2,3</sup></b> Amikacin Ampicillin/sulbactam Cefepime Ceftriaxone Ceftazidime Ciprofloxacin Colistin Gentamicin Imipenem Levofloxacin Meropenem Trimethoprim/sulfamethoxazole Tobramycin Tetracycline	Resistant Sensitive Resistant Resistant Resistant Resistant Resistant Sensitive Resistant Sensitive Resistant Sensitive Resistant Resistant Resistant	Resistant (> 256 µg/mL) Sensitive (3 to 4 µg/mL) Resistant (> 256 µg/mL) Resistant (> 32 µg/mL) Resistant (≥ 64 µg/mL) Resistant (≥ 4 µg/mL) Sensitive (≤ 0.25 to 0.5 µg/mL) Resistant (≥ 16 µg/mL) Sensitive (≤ 1 µg/mL) Intermediate (4 µg/mL) <sup>4</sup> Sensitive (≤ 1 µg/mL) Resistant (≥ 4 µg/mL) Resistant (≥ 16 µg/mL) Resistant (> 256 µg/mL)
<b>Genotypic Analysis</b> Sequencing of 16S ribosomal RNA gene (~ 1470 base pairs)	≥ 99% sequence identity to <i>A. baumannii</i> , strain MRSN 30000 (GenBank: VHGB01000062.1)	100% sequence identity to <i>A. baumannii</i> , strain MRSN 30000 (GenBank: VHGB01000062.1)
<b>Purity</b> 7 days at 37°C in an aerobic atmosphere with and without 5% CO <sub>2</sub> on Tryptic Soy agar	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology

TEST	SPECIFICATIONS	RESULTS
Viability	Growth	Growth

<sup>1</sup>Growth at 44°C differentiates *A. baumannii* from *A. calcoaceticus* and *A. pittii*, which do not grow at 44°C.

<sup>2</sup>Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S28 (2018)

<sup>3</sup>Antibiotic susceptibility was tested using a combination of VITEK<sup>®</sup>2 GN82, Sensititre GNX2F AST and E-test strips.

<sup>4</sup>The susceptibility result for this antibiotic is within one doubling dilution of specification, which is considered an equivalent result.

Figure 1: Colony Morphology



/Heather Couch/  
Heather Couch

15 NOV 2021

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**Acinetobacter baumannii, Strain MRSN 30885**

**Catalog No. NR-52214**

This reagent is the tangible property of the U.S. Government.

**Product Description:**

*Acinetobacter baumannii* (*A. baumannii*), strain MRSN 30885 was isolated in 2003 from a human respiratory sample in Europe as part of a global surveillance program. *A. baumannii*, strain MRSN 30885 was deposited as sensitive to amikacin, ceftazidime, ciprofloxacin, colistin, ceftriaxone, cefepime, gentamicin, imipenem, levofloxacin, meropenem, trimethoprim/sulfamethoxazole, tobramycin, ampicillin/sulbactam and tetracycline. NR-52214 lot 70042470 was produced by inoculation of the deposited material into Tryptic Soy broth and grown for 1 day at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar kolles, which were grown for 1 day at 37°C in an aerobic atmosphere to produce this lot. Quality control testing was completed under propagation conditions unless otherwise noted.

**Lot: 70042470**

**Manufacturing Date: 10MAR2021**

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TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis</b> Cellular morphology Colony morphology  Growth at 44°C ± 2°C <sup>1</sup> 1 day in an aerobic atmosphere on Tryptic Soy agar  Motility BBL™ Motility Test Medium w/TTC Indicator for 1 day at 37°C in an aerobic atmosphere VITEK® MS (MALDI-TOF)	Gram-negative rods Report results  Growth  Report results  <i>A. baumannii</i>	Gram-negative rods Circular, convex, entire, smooth and cream (Figure 1) Growth  Non-motile  <i>A. baumannii</i> (99.9%)
<b>Antibiotic Susceptibility Profile<sup>2,3</sup></b> Amikacin Ampicillin/sulbactam Cefepime Ceftriaxone Ceftazidime Ciprofloxacin Colistin Gentamicin Imipenem Levofloxacin Meropenem Trimethoprim/sulfamethoxazole Tobramycin Tetracycline	Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive	Sensitive (8 µg/mL) Sensitive (≤ 2 µg/mL) Sensitive (1.5 µg/mL) Sensitive (8 µg/mL) Sensitive (8 µg/mL) Sensitive (≤ 0.25 µg/mL) Sensitive (≤ 0.25 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (1 µg/mL) Sensitive (≤ 1 µg/mL) Intermediate (6 µg/mL) <sup>4</sup>
<b>Genotypic Analysis</b> Sequencing of 16S ribosomal RNA gene (~ 1470 base pairs)	≥ 99% sequence identity to <i>A. baumannii</i> , strain MRSN 30885 (GenBank: VHGA01000107.1)	99.9% sequence identity to <i>A. baumannii</i> , strain MRSN 30885 (GenBank: VHGA01000107.1)
<b>Purity</b> 7 days at 37°C in an aerobic atmosphere with and without 5% CO <sub>2</sub> on Tryptic Soy agar	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology

TEST	SPECIFICATIONS	RESULTS
Viability	Growth	Growth

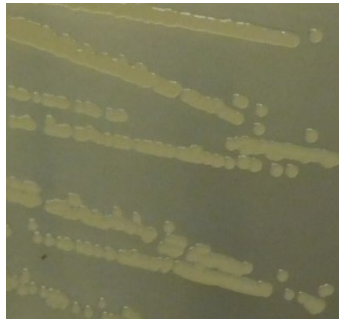
<sup>1</sup>Growth at 44°C differentiates *A. baumannii* from *A. calcoaceticus* and *A. pittii*, which do not grow at 44°C.

<sup>2</sup>Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S28 (2018)

<sup>3</sup>Antibiotic susceptibility was tested using a combination of VITEK<sup>®</sup>2 GN82, Sensititre™ GNX2F AST and E-test strips.

<sup>4</sup>*A. baumannii*, strain MRSN 30885 was deposited as sensitive to tetracycline, but showed a MIC of 6 µg/mL (interpreted as intermediate) for tetracycline during QC testing. Testing was performed in duplicate.

Figure 1: Colony Morphology



/Heather Couch/  
Heather Couch

12 AUG 2021

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**Acinetobacter baumannii, Strain MRSN 30896**

**Catalog No. NR-52215**

This reagent is the tangible property of the U.S. Government.

**Product Description:**

*Acinetobacter baumannii* (*A. baumannii*), strain MRSN 30896 was isolated in 2003 from a wound specimen in Europe as part of a global surveillance program. *A. baumannii*, strain MRSN 30896 was deposited as sensitive to amikacin, ceftazidime, ciprofloxacin, colistin, cefepime, imipenem, levofloxacin, meropenem, ampicillin/sulbactam and trimethoprim/sulfamethoxazole and resistant to gentamicin, tobramycin and tetracycline, with intermediate resistance to ceftriaxone. NR-52215 lot 70041132 was produced by inoculation of the deposited material into Tryptic Soy broth and grown for 1 day at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar kolles, which were grown for 1 day at 37°C in an aerobic atmosphere to produce this lot. Quality control testing was completed under propagation conditions unless otherwise noted.

**Lot: 70041132**

**Manufacturing Date: 06JAN2021**

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TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis</b> Cellular morphology Colony morphology  Growth at 44°C ± 2°C <sup>1</sup> 1 day in an aerobic atmosphere on Tryptic Soy agar Motility Remel™ Motility Test Medium w/TTC Indicator for 1 day at 37°C in an aerobic atmosphere VITEK® MS (MALDI-TOF)	Gram-negative rods Report results  Growth  Report results  <i>A. baumannii</i>	Gram-negative rods Circular, convex, entire, smooth and cream (Figure 1) Growth  Motile  <i>A. baumannii</i> (99.9%)
<b>Antibiotic Susceptibility Profile<sup>2,3</sup></b> Amikacin Ampicillin/sulbactam Cefepime Ceftriaxone Ceftazidime Ciprofloxacin Colistin Gentamicin Imipenem Levofloxacin Meropenem Trimethoprim/sulfamethoxazole Tobramycin Tetracycline	Sensitive Sensitive Sensitive Intermediate Sensitive Sensitive Sensitive Sensitive Resistant Sensitive Sensitive Sensitive Sensitive Sensitive Resistant Resistant	Sensitive (4 µg/mL) Sensitive (2 µg/mL) Sensitive (3 µg/mL) Resistant (≥ 32 µg/mL) <sup>4</sup> Sensitive (8 µg/mL) Sensitive (≤ 0.25 µg/mL) Sensitive (0.5 µg/mL) Resistant (≥ 16 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (2 µg/mL) Sensitive (≤ 0.5 µg/mL) Resistant (≥ 16 µg/mL) Resistant (> 256 µg/mL)
<b>Genotypic Analysis</b> Sequencing of 16S ribosomal RNA gene (~ 1480 base pairs)	≥ 99% sequence identity to <i>A. baumannii</i> , strain MRSN 30896 (GenBank: VHFZ01000068.1)	100% sequence identity to <i>A. baumannii</i> , strain MRSN 30896 (GenBank: VHFZ01000068.1)
<b>Purity</b> 7 days at 37°C in an aerobic atmosphere with and without 5% CO <sub>2</sub> on Tryptic Soy agar	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology



TEST	SPECIFICATIONS	RESULTS
Viability	Growth	Growth

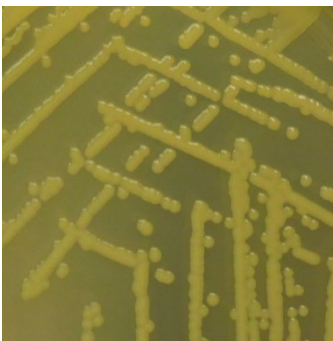
<sup>1</sup>Growth at 44°C differentiates *A. baumannii* from *A. calcoaceticus* and *A. pittii*, which do not grow at 44°C.

<sup>2</sup>Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S28 (2018)

<sup>3</sup>Antibiotic susceptibility was tested using a combination of VITEK2 GN82, Sensititre GNX2F AST and E-test strips.

<sup>4</sup>*A. baumannii*, strain MRSN 30896 was deposited as intermediate to ceftriaxone, but showed a MIC of  $\geq 32$  µg/mL (interpreted as resistant) for ceftriaxone during QC testing. Testing was performed in duplicate.

Figure 1: Colony Morphology



/Heather Couch/  
Heather Couch

06 MAY 2021

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**Acinetobacter baumannii, Strain MRSN 30909**

**Catalog No. NR-52216**

This reagent is the tangible property of the U.S. Government.

**Product Description:**

*Acinetobacter baumannii* (*A. baumannii*), strain MRSN 30909 was isolated in 2003 from a human specimen in Europe as part of a global surveillance program. *A. baumannii*, strain MRSN 30909 was deposited as multi-locus sequence type (MLST) ST 32, sensitive to amikacin, ampicillin/sulbactam, cefepime, ceftazidime, ciprofloxacin, colistin, gentamicin, imipenem, levofloxacin, meropenem, tetracycline, trimethoprim/sulfamethoxazole and tobramycin and intermediately resistant to ceftriaxone. NR-52216 lot 70042472 was produced by inoculation of the deposited material into Tryptic Soy broth and grown for 1 day at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar kolles, which were grown for 1 day at 37°C in an aerobic atmosphere to produce this lot. Quality control testing was completed under propagation conditions unless otherwise noted.

**Lot: 70042472**

**Manufacturing Date: 03MAR2021**

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TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis</b> Cellular morphology Colony morphology  Growth at 44°C ± 2°C <sup>1</sup> 1 day in an aerobic atmosphere on Tryptic Soy agar Motility Remel™ Motility Test Medium w/TTC Indicator for 1 day at 37°C in an aerobic atmosphere VITEK® MS (MALDI-TOF)	Gram-negative rods Report results  Growth  Report results  <i>A. baumannii</i>	Gram-negative rods Circular, convex, entire, smooth and cream (Figure 1) Growth  Non-motile  <i>A. baumannii</i> (99.9%)
<b>Antibiotic Susceptibility Profile<sup>2,3</sup></b> Amikacin Ampicillin/sulbactam Cefepime Ceftriaxone Ceftazidime Ciprofloxacin Colistin Gentamicin Imipenem Levofloxacin Meropenem Trimethoprim/sulfamethoxazole Tobramycin Tetracycline	Sensitive Sensitive Sensitive Intermediate Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive	Sensitive (8 µg/mL) Sensitive (1.5 µg/mL) Sensitive (4 µg/mL) Intermediate (32 µg/mL) Sensitive (4 µg/mL) Sensitive (0.5 µg/mL) Sensitive (≤ 0.25 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Intermediate (8 µg/mL) <sup>4</sup>
<b>Genotypic Analysis</b> Sequencing of 16S ribosomal RNA gene (~ 1400 base pairs)	≥ 99% sequence identity to <i>A. baumannii</i> , strain MRSN 30909 (GenBank: VHFY01000082.1)	100% sequence identity to <i>A. baumannii</i> , strain MRSN 30909 (GenBank: VHFY01000082.1)
<b>Purity</b> 7 days at 37°C in an aerobic atmosphere with and without 5% CO <sub>2</sub> on Tryptic Soy agar	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology

TEST	SPECIFICATIONS	RESULTS
Viability	Growth	Growth

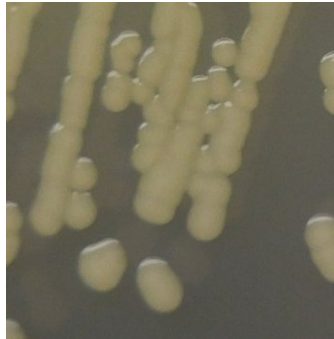
<sup>1</sup>Growth at 44°C differentiates *A. baumannii* from *A. calcoaceticus* and *A. pittii*, which do not grow at 44°C.

<sup>2</sup>Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S28 (2018)

<sup>3</sup>Antibiotic susceptibility was tested using a combination of VITEK<sup>®</sup>2 GN82, Sensititre GNX2F AST and E-test strips.

<sup>4</sup>*A. baumannii*, strain MRSN 30909 was deposited as being sensitive to tetracycline. Repeated antibiotic susceptibility testing determined that for strain MRSN 30909, the tetracycline MIC is 8 µg per mL, which is interpreted as intermediately resistant. Testing was performed in duplicate.

Figure 1: Colony Morphology



/Heather Couch/

Heather Couch

24 JAN 2022

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**Acinetobacter baumannii, Strain MRSN 30912**

**Catalog No. NR-52217**

This reagent is the tangible property of the U.S. Government.

**Product Description:**

*Acinetobacter baumannii* (*A. baumannii*), strain MRSN 30912 was isolated in 2003 from a human in Europe as part of a global surveillance program. *A. baumannii*, strain MRSN 30912 was deposited as sensitive to amikacin, ampicillin/sulbactam, cefepime, ceftazidime, ceftriaxone, ciprofloxacin, colistin, gentamicin, imipenem, levofloxacin, meropenem, tetracycline, tobramycin and trimethoprim/sulfamethoxazole. NR-52217 lot 70042476 was produced by inoculation of the deposited material into Tryptic Soy broth and grown for 1 day at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar kolles, which were grown for 1 day at 37°C in an aerobic atmosphere to produce this lot. Quality control testing was completed under propagation conditions unless otherwise noted.

**Lot: 70042476**

**Manufacturing Date: 03MAR2021**

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TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis</b> Cellular morphology Colony morphology  Growth at 44°C ± 2°C <sup>1</sup> 1 day in an aerobic atmosphere on Tryptic Soy agar  Motility Remel™ Motility Test Medium w/TTC Indicator for 1 day at 37°C in an aerobic atmosphere  VITEK® MS (MALDI-TOF)	Gram-negative rods Report results  Growth  Report results  <i>A. baumannii</i>	Gram-negative rods Circular, convex, entire, smooth and cream (Figure 1) Growth  Non-motile  <i>A. baumannii</i> (99.9%)
<b>Antibiotic Susceptibility Profile<sup>2,3</sup></b> Amikacin Ampicillin/sulbactam Cefepime Ceftriaxone Ceftazidime Ciprofloxacin Colistin Gentamicin Imipenem Levofloxacin Meropenem Trimethoprim/sulfamethoxazole Tobramycin Tetracycline	Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive	Sensitive (12 µg/mL) Sensitive (1.5 µg/mL) Sensitive (2 µg/mL) Resistant (> 32 µg/mL) <sup>4</sup> Sensitive (4 µg/mL) Sensitive (≤ 0.25 µg/mL) Sensitive (≤ 0.25 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 0.5 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (3 µg/mL)
<b>Genotypic Analysis</b> Sequencing of 16S ribosomal RNA gene (~ 1420 base pairs)	≥ 99% sequence identity to <i>A. baumannii</i> , strain MRSN 30912 (GenBank: VFHX01000049.1)	99.8% sequence identity to <i>A. baumannii</i> , strain MRSN 30912 (GenBank: VFHX01000049.1)
<b>Purity</b> 7 days at 37°C in an aerobic atmosphere with and without 5% CO <sub>2</sub> on Tryptic Soy agar	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology

TEST	SPECIFICATIONS	RESULTS
Viability	Growth	Growth

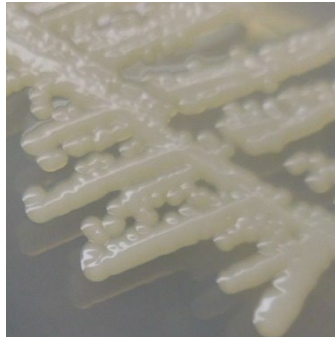
<sup>1</sup>Growth at 44°C differentiates *A. baumannii* from *A. calcoaceticus* and *A. pittii*, which do not grow at 44°C.

<sup>2</sup>Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S28 (2018)

<sup>3</sup>Antibiotic susceptibility was tested using a combination of VITEK<sup>®</sup>2 GN82, Sensititre™ GNX2F AST and E-test strips.

<sup>4</sup>*A. baumannii*, strain MRSN 30912 was deposited as sensitive to ceftriaxone, but showed a MIC of > 32 µg per mL (interpreted as resistant) for ceftriaxone during QC testing. Testing was performed in duplicate.

Figure 1: Colony Morphology



/Heather Couch/  
Heather Couch

15 JUL 2021

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**Acinetobacter baumannii, Strain MRSN 30945**

**Catalog No. NR-52218**

This reagent is the tangible property of the U.S. Government.

**Product Description:**

*Acinetobacter baumannii* (*A. baumannii*), strain MRSN 30945 was isolated in 2003 from a human in Europe as part of a global surveillance program. *A. baumannii*, strain MRSN 30945 was deposited as sensitive to amikacin, ampicillin/sulbactam, cefepime, ceftazidime, ceftriaxone, ciprofloxacin, colistin, gentamicin, imipenem, levofloxacin, meropenem, tobramycin, trimethoprim/sulfamethoxazole and tetracycline. NR-52218 lot 70042831 was produced by inoculation of the deposited material into Tryptic Soy broth and grown for 1 day at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar kolles, which were grown for 1 day at 37°C in an aerobic atmosphere to produce this lot. Quality control testing was completed under propagation conditions unless otherwise noted.

**Lot: 70042831**

**Manufacturing Date: 17MAR2021**

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TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis</b> Cellular morphology Colony morphology  Growth at 44°C ± 2°C <sup>1</sup> 1 day in an aerobic atmosphere on Tryptic Soy agar Motility BBL™ Motility Test Medium w/TTC Indicator for 1 day at 37°C in an aerobic atmosphere VITEK® MS (MALDI-TOF)	Gram-negative rods Report results  Growth  Report results  <i>A. baumannii</i>	Gram-negative rods Circular, convex, entire, smooth and cream (Figure 1) Growth  Non-motile  <i>A. baumannii</i> (99.9%)
<b>Antibiotic Susceptibility Profile<sup>2,3</sup></b> Amikacin Ampicillin/sulbactam Cefepime Ceftriaxone Ceftazidime Ciprofloxacin Colistin Gentamicin Imipenem Levofloxacin Meropenem Trimethoprim/sulfamethoxazole Tobramycin Tetracycline	Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive	Sensitive (4 µg/mL) Sensitive (1.5 µg/mL) Sensitive (2 to 3 µg/mL) Sensitive (8 µg/mL) Sensitive (4 µg/mL) Sensitive (≤ 0.25 µg/mL) Sensitive (≤ 0.25 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 0.5 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (4 µg/mL)
<b>Genotypic Analysis</b> Sequencing of 16S ribosomal RNA gene (~ 1470 base pairs)	≥ 99% sequence identity to <i>A. baumannii</i> , strain MRSN 30945 (GenBank: VHF01000056.1)	100% sequence identity to <i>A. baumannii</i> , strain MRSN 30945 (GenBank: VHF01000056.1)
<b>Purity</b> 7 days at 37°C in an aerobic atmosphere with and without 5% CO <sub>2</sub> on Tryptic Soy agar	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology

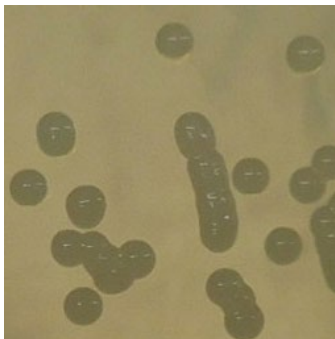
TEST	SPECIFICATIONS	RESULTS
Viability	Growth	Growth

<sup>1</sup>Growth at 44°C differentiates *A. baumannii* from *A. calcoaceticus* and *A. pittii*, which do not grow at 44°C.

<sup>2</sup>Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S28 (2018)

<sup>3</sup>Antibiotic susceptibility was tested using a combination of VITEK<sup>®</sup>2 GN82, Sensititre GNX2F AST and E-test strips.

Figure 1: Colony Morphology



/Heather Couch/  
Heather Couch

05 FEB 2022

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**Acinetobacter baumannii, Strain MRSN 31159**

**Catalog No. NR-52219**

This reagent is the tangible property of the U.S. Government.

**Product Description:**

*Acinetobacter baumannii* (*A. baumannii*), strain MRSN 31159 was isolated in 2004 from a human tissue sample in Europe as part of a global surveillance program. *A. baumannii*, strain MRSN 31159 was deposited as sensitive to amikacin, ampicillin/sulbactam, cefepime, ceftazidime, ceftriaxone, ciprofloxacin, colistin, gentamicin, imipenem, levofloxacin, meropenem, tobramycin, trimethoprim/sulfamethoxazole and tetracycline. NR-52219 lot 70042835 was produced by inoculation of the deposited material into Tryptic Soy broth and grown for 1 day at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar kolles, which were grown for 1 day at 37°C in an aerobic atmosphere to produce this lot. Quality control testing was completed under propagation conditions unless otherwise noted.

**Lot: 70042835**

**Manufacturing Date: 17MAR2021**

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TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis</b> Cellular morphology Colony morphology  Growth at 44°C ± 2°C <sup>1</sup> 1 day in an aerobic atmosphere on Tryptic Soy agar Motility BBL™ Motility Test Medium w/TTC Indicator for 1 day at 37°C in an aerobic atmosphere VITEK® MS (MALDI-TOF)	Gram-negative rods Report results  Growth  Report results  <i>A. baumannii</i>	Gram-negative rods Circular, convex, entire, smooth and cream (Figure 1) Growth  Non-motile  <i>A. baumannii</i> (99.9%)
<b>Antibiotic Susceptibility Profile<sup>2,3</sup></b> Amikacin Ampicillin/sulbactam Cefepime Ceftriaxone Ceftazidime Ciprofloxacin Colistin Gentamicin Imipenem Levofloxacin Meropenem Trimethoprim/sulfamethoxazole Tobramycin Tetracycline	Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive	Sensitive (8 µg/mL) Sensitive (1 µg/mL) Sensitive (1.5 µg/mL) Sensitive (8 µg/mL) Sensitive (4 µg/mL) Sensitive (≤ 0.25 µg/mL) Sensitive (≤ 0.25 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 0.5 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (3 to 4 µg/mL)
<b>Genotypic Analysis</b> Sequencing of 16S ribosomal RNA gene (~ 1470 base pairs)	≥ 99% sequence identity to <i>A. baumannii</i> , strain MRSN 31159 (GenBank: VHFV01000151.1)	99.8% sequence identity to <i>A. baumannii</i> , strain MRSN 31159 (GenBank: VHFV01000151.1)
<b>Purity</b> 7 days at 37°C in an aerobic atmosphere with and without 5% CO <sub>2</sub> on Tryptic Soy agar	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology



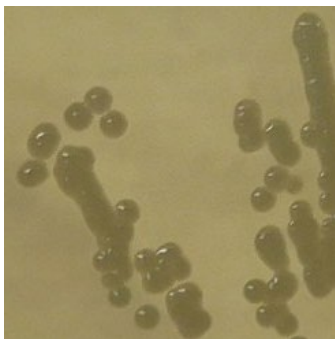
TEST	SPECIFICATIONS	RESULTS
Viability	Growth	Growth

<sup>1</sup>Growth at 44°C differentiates *A. baumannii* from *A. calcoaceticus* and *A. pittii*, which do not grow at 44°C.

<sup>2</sup>Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S28 (2018)

<sup>3</sup>Antibiotic susceptibility was tested using a combination of VITEK<sup>®</sup>2 GN82, Sensititre GNX2F AST and E-test strips.

Figure 1: Colony Morphology



/Heather Couch/  
Heather Couch

05 FEB 2022

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**Acinetobacter baumannii, Strain MRSN 31196**

**Catalog No. NR-52220**

This reagent is the tangible property of the U.S. Government.

**Product Description:**

*Acinetobacter baumannii* (*A. baumannii*), strain MRSN 31196 was isolated in 2015 from a human in Europe as part of a global surveillance program. *A. baumannii*, strain MRSN 31196 was deposited as sensitive to colistin, intermediately resistant to tobramycin and resistant to amikacin, ampicillin/sulbactam, cefepime, ceftazidime, ceftriaxone, ciprofloxacin, gentamicin, imipenem, levofloxacin, meropenem, trimethoprim/sulfamethoxazole and tetracycline. NR-52220 lot 70039053 was produced by inoculation of the deposited material into Tryptic Soy broth and grown for 1 day at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar kolles, which were grown for 1 day at 37°C in an aerobic atmosphere to produce this lot. Quality control testing was completed under propagation conditions unless otherwise noted.

**Lot: 70039053**

**Manufacturing Date: 11SEP2020**

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TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis</b> Cellular morphology Colony morphology  Growth at 44°C ± 2°C <sup>1</sup> 1 day in an aerobic atmosphere on Tryptic Soy agar Motility Remel™ Motility Test Medium w/TTC Indicator for 1 day at 37°C in an aerobic atmosphere  VITEK® MS (MALDI-TOF)	Gram-negative rods Report results  Growth  Report results  <i>A. baumannii</i>	Gram-negative rods Circular, convex, entire, smooth and cream (Figure 1) Growth  Motile  <i>A. baumannii</i> (99.9%)
<b>Antibiotic Susceptibility Profile<sup>2,3</sup></b> Amikacin Ampicillin/sulbactam Cefepime Ceftriaxone Ceftazidime Ciprofloxacin Colistin Gentamicin Imipenem Levofloxacin Meropenem Trimethoprim/sulfamethoxazole Tobramycin Tetracycline	Resistant Resistant Resistant Resistant Resistant Resistant Resistant Sensitive Resistant Resistant Resistant Resistant Resistant Resistant Intermediate Resistant	Resistant (> 256 µg/mL) Resistant (48 µg/mL) Resistant (> 256 µg/mL) Resistant (≥ 64 µg/mL) Resistant (≥ 64 µg/mL) Resistant (≥ 4 µg/mL) Sensitive (≤ 1 µg/mL) Resistant (≥ 16 µg/mL) Resistant (≥ 8 µg/mL) Resistant (8 µg/mL) Resistant (> 8 µg/mL) Resistant (> 4 µg/mL) Intermediate (8 µg/mL) Resistant (256 µg/mL)
<b>Genotypic Analysis</b> Sequencing of 16S ribosomal RNA gene (1470 base pairs)	≥ 99% sequence identity to <i>A. baumannii</i> , strain MRSN 31196 (GenBank: VHFU01000076.1)	100% sequence identity to <i>A. baumannii</i> , strain MRSN 31196 (GenBank: VHFU01000076.1)
<b>Purity</b> 7 days at 37°C in an aerobic atmosphere with and without 5% CO <sub>2</sub> on Tryptic Soy agar	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology

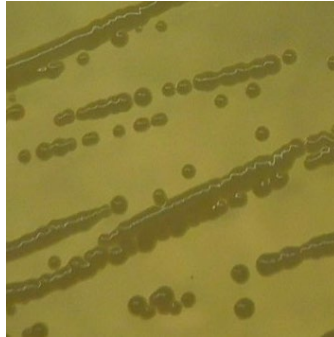
TEST	SPECIFICATIONS	RESULTS
Viability	Growth	Growth

<sup>1</sup>Growth at 44°C differentiates *A. baumannii* from *A. calcoaceticus* and *A. pittii*, which do not grow at 44°C.

<sup>2</sup>Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S28 (2018)

<sup>3</sup>Antibiotic susceptibility was tested using a combination of VITEK<sup>®</sup>2 GN82, Sensititre GNX2F AST and E-test strips.

Figure 1: Colony Morphology



/Heather Couch/

Heather Couch

24 JAN 2022

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***Acinetobacter baumannii*, Strain MRSN 31461**

**Catalog No. NR-52221**

This reagent is the tangible property of the U.S. Government.

**Product Description:**

*Acinetobacter baumannii* (*A. baumannii*), strain MRSN 31461 was isolated in 2003 from a human in Europe as part of a global surveillance program. *A. baumannii*, strain MRSN 31461 was deposited as multi-locus sequence type (MLST) ST 49, sensitive to amikacin, colistin, ampicillin/sulbactam, cefepime, ceftazidime, ceftriaxone, ciprofloxacin, gentamicin, imipenem, levofloxacin, meropenem, tobramycin, trimethoprim/sulfamethoxazole and tetracycline. NR-52221 was produced by inoculation of the deposited material into Tryptic Soy broth and grown for 1 day at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar kolles, which were grown for 1 day at 37°C in an aerobic atmosphere to produce this lot. Quality control testing was completed under propagation conditions unless otherwise noted.

**Lot: 70042839**

**Manufacturing Date: 17MAR2021**

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TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis</b> Cellular morphology Colony morphology  Growth at 44°C ± 2°C <sup>1</sup> 1 day in an aerobic atmosphere on Tryptic Soy agar Motility Remel™ Motility Test Medium w/TTC Indicator for 1 day at 37°C in an aerobic atmosphere VITEK® MS (MALDI-TOF)	Gram-negative rods Report results  Growth  Report results  <i>A. baumannii</i>	Gram-negative rods Circular, convex, entire, smooth and cream (Figure 1) Growth  Non-motile  <i>A. baumannii</i> (99.9%)
<b>Antibiotic Susceptibility Profile<sup>2,3</sup></b> Amikacin Ampicillin/sulbactam Cefepime Ceftriaxone Ceftazidime Ciprofloxacin Colistin Gentamicin Imipenem Levofloxacin Meropenem Trimethoprim/sulfamethoxazole Tobramycin Tetracycline	Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive	Sensitive (12 µg/mL) Sensitive (1.5 µg/mL) Sensitive (2 µg/mL) Sensitive (8 µg/mL) Sensitive (4 µg/mL) Sensitive (≤ 0.25 µg/mL) Sensitive (≤ 0.5 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 0.5 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (3 to 4 µg/mL)
<b>Genotypic Analysis</b> Sequencing of 16S ribosomal RNA gene (780 base pairs)	≥ 99% sequence identity to <i>A. baumannii</i> , strain MRSN 31461 (GenBank: VHFT01000057.1)	100% sequence identity to <i>A. baumannii</i> , strain MRSN 31461 (GenBank: VHFT01000057.1)
<b>Purity</b> 7 days at 37°C in an aerobic atmosphere with and without 5% CO <sub>2</sub> on Tryptic Soy agar	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology

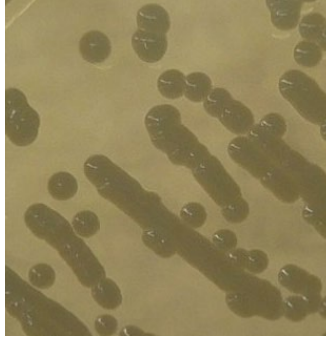
TEST	SPECIFICATIONS	RESULTS
Viability	Growth	Growth

<sup>1</sup>Growth at 44°C differentiates *A. baumannii* from *A. calcoaceticus* and *A. pittii*, which do not grow at 44°C.

<sup>2</sup>Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S28 (2018)

<sup>3</sup>Antibiotic susceptibility was tested using a combination of VITEK<sup>®</sup>2 GN82, Sensititre GNX2F AST and E-test strips.

Figure 1: Colony Morphology



/Heather Couch/  
Heather Couch

25 JAN 2022

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**Acinetobacter baumannii, Strain MRSN 31468**

**Catalog No. NR-52222**

This reagent is the tangible property of the U.S. Government.

**Product Description:**

*Acinetobacter baumannii* (*A. baumannii*), strain MRSN 31468 was isolated in 2003 from a human sample in Europe as part of a global surveillance program. *A. baumannii*, strain MRSN 31468 was deposited as sensitive to amikacin, ampicillin/sulbactam, cefepime, ceftazidime, ciprofloxacin, colistin, gentamicin, imipenem, levofloxacin, meropenem, tobramycin, trimethoprim/sulfamethoxazole and tetracycline and intermediately resistant to ceftriaxone. NR-52222 lot 70042842 was produced by inoculation of the deposited material into Tryptic Soy broth and grown for 1 day at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar kolles, which were grown for 1 day at 37°C in an aerobic atmosphere to produce this lot. Quality control testing was completed under propagation conditions unless otherwise noted.

**Lot: 70042842**

**Manufacturing Date: 17MAR2021**

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TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis</b> Cellular morphology Colony morphology  Growth at 44°C ± 2°C <sup>1</sup> 1 day in an aerobic atmosphere on Tryptic Soy agar Motility BBL™ Motility Test Medium w/TTC Indicator for 1 day at 37°C in an aerobic atmosphere VITEK® MS (MALDI-TOF)	Gram-negative rods Report results  Growth  Report results  <i>A. baumannii</i>	Gram-negative rods Circular, convex, entire, smooth and cream Growth  Non-motile  <i>A. baumannii</i> (99.9%)
<b>Antibiotic Susceptibility Profile<sup>2,3</sup></b> Amikacin Ampicillin/sulbactam Cefepime Ceftriaxone Ceftazidime Ciprofloxacin Colistin Gentamicin Imipenem Levofloxacin Meropenem Trimethoprim/sulfamethoxazole Tobramycin Tetracycline	Sensitive Sensitive Sensitive Intermediate Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive	Sensitive (≤ 4 µg/mL) Sensitive (3 µg/mL) Sensitive (4 µg/mL) Intermediate (24 µg/mL) Sensitive (4 µg/mL) Sensitive (1 µg/mL) Sensitive (≤ 0.25 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 2 µg/mL) Sensitive (1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (4 µg/mL)
<b>Genotypic Analysis</b> Sequencing of 16S ribosomal RNA gene (~ 1470 base pairs)	≥ 99% sequence identity to <i>A. baumannii</i> , strain MRSN 31468 (GenBank: VFHS01000069.1)	100% sequence identity to <i>A. baumannii</i> , strain MRSN 31468 (GenBank: VFHS01000069.1)
<b>Purity</b> 7 days at 37°C in an aerobic atmosphere with and without 5% CO <sub>2</sub> on Tryptic Soy agar	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology

TEST	SPECIFICATIONS	RESULTS
Viability	Growth	Growth

<sup>1</sup>Growth at 44°C differentiates *A. baumannii* from *A. calcoaceticus* and *A. pittii*, which do not grow at 44°C.

<sup>2</sup>Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S28 (2018)

<sup>3</sup>Antibiotic susceptibility was tested using a combination of VITEK<sup>®</sup>2 GN82, Sensititre GNX2F AST and E-test strips.

/Heather Couch/  
Heather Couch

25 JAN 2022

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**Acinetobacter baumannii, Strain MRSN 31523**

**Catalog No. NR-52223**

This reagent is the tangible property of the U.S. Government.

**Product Description:**

*Acinetobacter baumannii* (*A. baumannii*), strain MRSN 31523 was isolated in 2004 from a human sample in Europe as part of a global surveillance program. *A. baumannii*, strain MRSN 31523 was deposited as sensitive to amikacin, ciprofloxacin, colistin, imipenem, levofloxacin, meropenem and tetracycline, intermediately resistant to ampicillin/sulbactam and resistant to cefepime, ceftazidime, ceftriaxone, gentamicin, trimethoprim/sulfamethoxazole and tobramycin. NR-52223 lot 70041134 was produced by inoculation of the deposited material into Tryptic Soy broth and grown for 1 day at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar kolles, which were grown for 1 day at 37°C in an aerobic atmosphere to produce this lot. Quality control testing was completed under propagation conditions unless otherwise noted.

**Lot: 70041134**

**Manufacturing Date: 30DEC2020**

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TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis</b> Cellular morphology Colony morphology  Growth at 44°C ± 2°C <sup>1</sup> 1 day in an aerobic atmosphere on Tryptic Soy agar Motility Remel™ Motility Test Medium w/TTC Indicator for 1 day at 37°C in an aerobic atmosphere VITEK® MS (MALDI-TOF)	Gram-negative rods Report results  Growth  Report results  <i>A. baumannii</i>	Gram-negative rods Circular, convex, entire, smooth and cream Growth  Motile  <i>A. baumannii</i> (99.9%)
<b>Antibiotic Susceptibility Profile<sup>2,3</sup></b> Amikacin Ampicillin/sulbactam Cefepime Ceftriaxone Ceftazidime Ciprofloxacin Colistin Gentamicin Imipenem Levofloxacin Meropenem Trimethoprim/sulfamethoxazole Tobramycin Tetracycline	Sensitive Intermediate Resistant Resistant Resistant Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Resistant Resistant Sensitive	Sensitive (≤ 4 µg/mL) Sensitive (3 µg/mL) <sup>4</sup> Resistant (48 µg/mL) Resistant (> 32 µg/mL) Resistant (≥ 64 µg/mL) Sensitive (1 µg/mL) Sensitive (≤ 0.25 µg/mL) Resistant (48 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Resistant (> 4 µg/mL) Resistant (16 µg/mL) Intermediate (8 µg/mL) <sup>5</sup>
<b>Genotypic Analysis</b> Sequencing of 16S ribosomal RNA gene (~ 1480 base pairs)	≥ 99% sequence identity to <i>A. baumannii</i> , strain MRSN 31523 (GenBank: VFHR01000050.1)	100% sequence identity to <i>A. baumannii</i> , strain MRSN 31523 (GenBank: VFHR01000050.1)



TEST	SPECIFICATIONS	RESULTS
<b>Purity</b> 7 days at 37°C in an aerobic atmosphere with and without 5% CO <sub>2</sub> on Tryptic Soy agar	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology
<b>Viability</b>	Growth	Growth

<sup>1</sup>Growth at 44°C differentiates *A. baumannii* from *A. calcoaceticus* and *A. pittii*, which do not grow at 44°C.

<sup>2</sup>Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S28 (2018)

<sup>3</sup>Antibiotic susceptibility was tested using a combination of VITEK<sup>®</sup>2 GN82, Sensititre GNX2F AST and E-test strips.

<sup>4</sup>*A. baumannii*, strain MRSN 31523 was deposited as intermediately resistant to ampicillin/sulbactam, but showed a MIC of 3 µg per mL (interpreted as sensitive) for this antibiotic during QC testing. Testing was performed in duplicate.

<sup>5</sup>The susceptibility result for this antibiotic is within one doubling dilution of specification, which is considered an equivalent result.

/Heather Couch/

Heather Couch

07 FEB 2022

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**Acinetobacter baumannii, Strain MRSN 31915**

**Catalog No. NR-52224**

This reagent is the tangible property of the U.S. Government.

**Product Description:**

*Acinetobacter baumannii* (*A. baumannii*), strain MRSN 31915 was isolated in 2004 from a human in Europe as part of a global surveillance program. *A. baumannii*, strain MRSN 31915 was deposited as sensitive to amikacin, ampicillin/sulbactam, colistin, cefepime, ceftazidime, ceftriaxone, ciprofloxacin, gentamicin, imipenem, levofloxacin, meropenem, trimethoprim/sulfamethoxazole, tetracycline and tobramycin. NR-52224 lot 70042844 was produced by inoculation of the deposited material into Tryptic Soy broth and grown for 1 day at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar kolles, which were grown for 1 day at 37°C in an aerobic atmosphere to produce this lot. Quality control testing was completed under propagation conditions unless otherwise noted.

**Lot: 70042844**

**Manufacturing Date: 17MAR2021**

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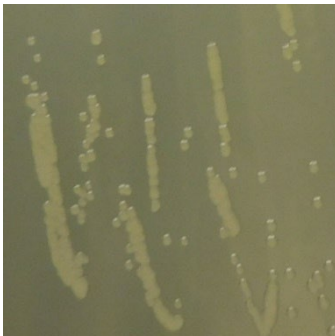
TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis</b> Cellular morphology Colony morphology  Growth at 44°C ± 2°C <sup>1</sup> 1 day in an aerobic atmosphere on Tryptic Soy agar Motility BBL™ Motility Test Medium w/TTC Indicator for 1 day at 37°C in an aerobic atmosphere VITEK® MS (MALDI-TOF)	Gram-negative rods Report results  Growth  Report results  <i>A. baumannii</i>	Gram-negative rods Circular, convex, entire, smooth and cream (Figure 1) Growth  Non-motile  <i>A. baumannii</i> (99.9%)
<b>Antibiotic Susceptibility Profile<sup>2,3</sup></b> Amikacin Ampicillin/sulbactam Cefepime Ceftriaxone Ceftazidime Ciprofloxacin Colistin Gentamicin Imipenem Levofloxacin Meropenem Trimethoprim/sulfamethoxazole Tobramycin Tetracycline	Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive	Sensitive (≤ 4 µg/mL) Sensitive (1.5 µg/mL) Sensitive (≤ 2 µg/mL) Sensitive (8 µg/mL) Sensitive (4 µg/mL) Sensitive (≤ 0.25 µg/mL) Sensitive (≤ 0.25 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 0.5 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (3 µg/mL)
<b>Genotypic Analysis</b> Sequencing of 16S ribosomal RNA gene (~ 1480 base pairs)	≥ 99% sequence identity to <i>A. baumannii</i> , strain MRSN 31915 (GenBank: VHFQ01000075.1)	100% sequence identity to <i>A. baumannii</i> , strain MRSN 31915 (GenBank: VHFQ01000075.1)
<b>Purity</b> 7 days at 37°C in an aerobic atmosphere with and without 5% CO <sub>2</sub> on Tryptic Soy agar	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology
<b>Viability</b>	Growth	Growth

<sup>1</sup>Growth at 44°C differentiates *A. baumannii* from *A. calcoaceticus* and *A. pittii*, which do not grow at 44°C.

<sup>2</sup>Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S28 (2018)

<sup>3</sup>Antibiotic susceptibility was tested using a combination of VITEK<sup>®</sup>2 GN82, Sensititre™ GNX2F AST and E-test strips.

**Figure 1: Colony Morphology**



/Heather Couch/  
Heather Couch

15 JUL 2021

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**Acinetobacter baumannii, Strain MRSN 31937**

**Catalog No. NR-52225**

This reagent is the tangible property of the U.S. Government.

**Product Description:**

*Acinetobacter baumannii* (*A. baumannii*), strain MRSN 31937 was isolated in 2004 from a human wound in Europe as part of a global surveillance program. *A. baumannii*, strain MRSN 31937 was deposited as sensitive to amikacin, ampicillin/sulbactam, cefepime, ceftazidime, ceftriaxone, ciprofloxacin, colistin, gentamicin, imipenem, levofloxacin, meropenem, tetracycline, tobramycin and trimethoprim/sulfamethoxazole. NR-52225 lot 70042846 was produced by inoculation of the deposited material into Tryptic Soy broth and grown for 1 day at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar kolles, which were grown for 1 day at 37°C in an aerobic atmosphere to produce this lot. Quality control testing was completed under propagation conditions unless otherwise noted.

**Lot: 70042846**

**Manufacturing Date: 17MAR2021**

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TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis</b> Cellular morphology Colony morphology  Growth at 44°C ± 2°C <sup>1</sup> 1 day in an aerobic atmosphere on Tryptic Soy agar Motility BBL™ Motility Test Medium w/TTC Indicator for 1 day at 37°C in an aerobic atmosphere  VITEK® MS (MALDI-TOF)	Gram-negative rods Report results  Growth  Report results  <i>A. baumannii</i>	Gram-negative rods Circular, convex, entire, smooth and cream (Figure 1) Growth  Non-motile  <i>A. baumannii</i> (99.9%)
<b>Antibiotic Susceptibility Profile<sup>2,3</sup></b> Amikacin Ampicillin/sulbactam Cefepime Ceftriaxone Ceftazidime Ciprofloxacin Colistin Gentamicin Imipenem Levofloxacin Meropenem Trimethoprim/sulfamethoxazole Tobramycin Tetracycline	Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive	Sensitive (≤ 4 µg/mL) Sensitive (≤ 1.5 µg/mL) Sensitive (≤ 2 µg/mL) Sensitive (8 µg/mL) Sensitive (4 µg/mL) Sensitive (≤ 0.5 µg/mL) Sensitive (≤ 0.5 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 0.5 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 4 µg/mL)
<b>Genotypic Analysis</b> Sequencing of 16S ribosomal RNA gene (~ 1480 base pairs)	≥ 99% sequence identity to <i>A. baumannii</i> , strain MRSN 31937 (GenBank: VHFPO1000152.1)	99.6% sequence identity to <i>A. baumannii</i> , strain MRSN 31937 (GenBank: VHFPO1000152.1)
<b>Purity</b> 7 days at 37°C in an aerobic atmosphere with and without 5% CO <sub>2</sub> on Tryptic Soy agar	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology

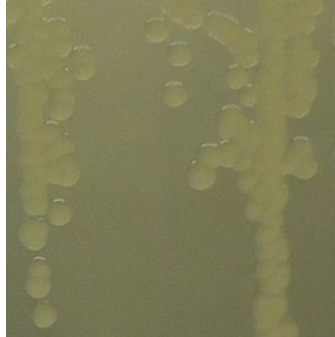
TEST	SPECIFICATIONS	RESULTS
Viability	Growth	Growth

<sup>1</sup>Growth at 44°C differentiates *A. baumannii* from *A. calcoaceticus* and *A. pittii*, which do not grow at 44°C.

<sup>2</sup>Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S28 (2018)

<sup>3</sup>Antibiotic susceptibility was tested using a combination of VITEK<sup>®</sup>2 GN82, Sensititre GNX2F AST and E-test strips.

**Figure 1: Colony Morphology**



/Heather Couch/  
Heather Couch

26 JAN 2022

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***Acinetobacter baumannii*, Strain MRSN 31942**

**Catalog No. NR-52226**

This reagent is the tangible property of the U.S. Government.

**Product Description:**

*Acinetobacter baumannii* (*A. baumannii*), strain MRSN 31942 was isolated in 2004 from a human in Europe as part of a global surveillance program. *A. baumannii*, strain MRSN 31942 was deposited as multi-locus sequence type (MLST) ST 32, sensitive to amikacin, ampicillin/sulbactam, cefepime, ceftazidime, ceftriaxone, ciprofloxacin, colistin, gentamicin, imipenem, levofloxacin, meropenem, trimethoprim/sulfamethoxazole and tobramycin, with intermediate resistance to tetracycline. NR-52226 lot 70042848 was produced by inoculation of the deposited material into Tryptic Soy broth and grown for 1 day at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar kolles, which were grown for 1 day at 37°C in an aerobic atmosphere to produce this lot. Quality control testing was completed under propagation conditions unless otherwise noted.

**Lot: 70042848**

**Manufacturing Date: 17MAR2021**

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TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis</b> Cellular morphology Colony morphology  Growth at 44°C ± 2°C <sup>1</sup> 1 day in an aerobic atmosphere on Tryptic Soy agar  Motility BBL™ Motility Test Medium w/TTC Indicator for 1 day at 37°C in an aerobic atmosphere VITEK® MS (MALDI-TOF)	Gram-negative rods Report results  Growth  Report results  <i>A. baumannii</i>	Gram-negative rods Circular, convex, entire, smooth and cream (Figure 1) Growth  Non-motile  <i>A. baumannii</i> (99.9%)
<b>Antibiotic Susceptibility Profile<sup>2,3</sup></b> Amikacin Ampicillin/sulbactam Cefepime Ceftriaxone Ceftazidime Ciprofloxacin Colistin Gentamicin Imipenem Levofloxacin Meropenem Trimethoprim/sulfamethoxazole Tobramycin Tetracycline	Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Intermediate	Sensitive (4 µg/mL) Sensitive (1 to 1.5 µg/mL) Sensitive (≤ 4 µg/mL) Resistant (> 32 µg/mL) <sup>4</sup> Sensitive (4 µg/mL) Sensitive (≤ 0.25 µg/mL) Sensitive (≤ 0.25 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 0.5 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Resistant (16 µg/mL) <sup>5</sup>
<b>Genotypic Analysis</b> Sequencing of 16S ribosomal RNA gene (~ 1470 base pairs)	≥ 99% sequence identity to <i>A. baumannii</i> , strain MRSN 31942 (GenBank: VFHFO01000079.1)	99.9% sequence identity to <i>A. baumannii</i> , strain MRSN 31942 (GenBank: VFHFO01000079.1)
<b>Purity</b> 7 days at 37°C in an aerobic atmosphere with and without 5% CO <sub>2</sub> on Tryptic Soy agar	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology

TEST	SPECIFICATIONS	RESULTS
Viability	Growth	Growth

<sup>1</sup>Growth at 44°C differentiates *A. baumannii* from *A. calcoaceticus* and *A. pittii*, which do not grow at 44°C.

<sup>2</sup>Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S28 (2018)

<sup>3</sup>Antibiotic susceptibility was tested using a combination of VITEK<sup>®</sup>2 GN82, Sensititre<sup>™</sup> GNX2F AST and E-test strips.

<sup>4</sup>*A. baumannii*, strain MRSN 31942 was deposited as sensitive to ceftriaxone, but showed a MIC of > 32 µg/mL (interpreted as resistant) for ceftriaxone during QC testing. Testing was performed in duplicate.

<sup>5</sup>Susceptibility result for this antibiotic is within one doubling dilution of specification, which is considered an equivalent result.

Figure 1: Colony Morphology



/Heather Couch/

Heather Couch

Program Manager or designee, ATCC Federal Solutions

13 JUL 2021

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***Acinetobacter baumannii*, Strain MRSN 31947**

**Catalog No. NR-52227**

This reagent is the tangible property of the U.S. Government.

**Product Description:**

*Acinetobacter baumannii* (*A. baumannii*), strain MRSN 31947 was isolated in 2004 from a human in Europe as part of a global surveillance program. *A. baumannii*, strain MRSN 31947 was deposited as multi-locus sequence type (MLST) ST 32, sensitive to amikacin, colistin, ampicillin/sulbactam, cefepime, ceftazidime, ciprofloxacin, gentamicin, imipenem, levofloxacin, meropenem, tobramycin, trimethoprim/sulfamethoxazole and tetracycline and intermediately resistant to ceftriaxone. NR-52227 was produced by inoculation of the deposited material into Tryptic Soy broth and grown for 1 day at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar kolles, which were grown for 1 day at 37°C in an aerobic atmosphere to produce this lot. Quality control testing was completed under propagation conditions unless otherwise noted.

**Lot: 70042850**

**Manufacturing Date: 17MAR2021**

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TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis</b> Cellular morphology Colony morphology  Growth at 44°C ± 2°C <sup>1</sup> 1 day in an aerobic atmosphere on Tryptic Soy agar Motility Remel™ Motility Test Medium w/TTC Indicator for 1 day at 37°C in an aerobic atmosphere VITEK® MS (MALDI-TOF)	Gram-negative rods Report results  Growth  Report results  <i>A. baumannii</i>	Gram-negative rods Circular, convex, entire, smooth and cream (Figure 1) Growth  Non-motile  <i>A. baumannii</i> (99.9%)
<b>Antibiotic Susceptibility Profile<sup>2,3</sup></b> Amikacin Ampicillin/sulbactam Cefepime Ceftriaxone Ceftazidime Ciprofloxacin Colistin Gentamicin Imipenem Levofloxacin Meropenem Trimethoprim/sulfamethoxazole Tobramycin Tetracycline	Sensitive Sensitive Sensitive Intermediate Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive	Sensitive (8 µg/mL) Sensitive (4 µg/mL) Sensitive (4 µg/mL) Resistant (32 µg/mL) <sup>4</sup> Sensitive (4 µg/mL) Sensitive (1 µg/mL) Sensitive (≤ 0.25 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 2 µg/mL) Sensitive (≤ 0.5 µg/mL) Sensitive (≤ 1 µg/mL) Inconclusive (8 to 12 µg/mL) <sup>5</sup>
<b>Genotypic Analysis</b> Sequencing of 16S ribosomal RNA gene (~ 1470 base pairs)	≥ 99% sequence identity to <i>A. baumannii</i> , strain MRSN 31947 (GenBank: VHFN01000065.1)	100% sequence identity to <i>A. baumannii</i> , strain MRSN 31947 (GenBank: VHFN01000065.1)



TEST	SPECIFICATIONS	RESULTS
<b>Purity</b> 7 days at 37°C in an aerobic atmosphere with and without 5% CO <sub>2</sub> on Tryptic Soy agar	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology
<b>Viability</b>	Growth	Growth

<sup>1</sup>Growth at 44°C differentiates *A. baumannii* from *A. calcoaceticus* and *A. pittii*, which do not grow at 44°C.

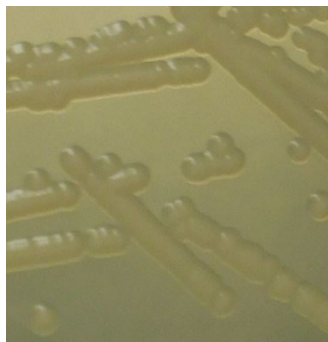
<sup>2</sup>Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S28 (2018)

<sup>3</sup>Antibiotic susceptibility was tested using a combination of VITEK<sup>®</sup>2 GN82, Sensititre GNX2F AST and E-test strips.

<sup>4</sup>Susceptibility results for this antibiotic are within one doubling dilution of specification, which is considered an equivalent result.

<sup>5</sup>*A. baumannii*, strain MRSN 31947 was deposited as being sensitive to tetracycline. Antibiotic susceptibility testing performed in duplicate determined that for strain MRSN 31947, the tetracycline MICs are 8 µg per mL and 12 µg per mL, which are interpreted as intermediate and resistant, respectively.

Figure 1: Colony Morphology



/Heather Couch/  
Heather Couch

02 FEB 2022

Program Manager or designee, ATCC Federal Solutions

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**Acinetobacter baumannii, Strain MRSN 32076**

**Catalog No. NR-52228**

This reagent is the tangible property of the U.S. Government.

**Product Description:**

*Acinetobacter baumannii* (*A. baumannii*), strain MRSN 32076 was isolated in 2006 from a human blood sample in Europe as part of a global surveillance program. *A. baumannii*, strain MRSN 32076 was deposited as sensitive to amikacin, ampicillin/sulbactam, cefepime, ceftazidime, ceftriaxone, ciprofloxacin, colistin, gentamicin, imipenem, levofloxacin, meropenem, tetracycline, trimethoprim/sulfamethoxazole and tobramycin. NR-52228 lot 70042852 was produced by inoculation of the deposited material into Tryptic Soy broth and grown for 1 day at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar kolles, which were grown for 1 day at 37°C in an aerobic atmosphere to produce this lot. Quality control testing was completed under propagation conditions unless otherwise noted.

**Lot: 70042852**

**Manufacturing Date: 17MAR2021**

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TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis</b> Cellular morphology Colony morphology  Growth at 44°C ± 2°C <sup>1</sup> 1 day in an aerobic atmosphere on Tryptic Soy agar  Motility BBL™ Motility Test Medium w/TTC Indicator for 1 day at 37°C in an aerobic atmosphere  VITEK® MS (MALDI-TOF)	Gram-negative rods Report results  Growth  Report results  <i>A. baumannii</i>	Gram-negative rods Circular, convex, entire, smooth and cream (Figure 1) Growth  Motile  <i>A. baumannii</i> (99.9%)
<b>Antibiotic Susceptibility Profile<sup>2,3</sup></b> Amikacin Ampicillin/sulbactam Cefepime Ceftriaxone Ceftazidime Ciprofloxacin Colistin Gentamicin Imipenem Levofloxacin Meropenem Trimethoprim/sulfamethoxazole Tobramycin Tetracycline	Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive	Sensitive (8 µg/mL) Sensitive (≤ 2 µg/mL) Sensitive (≤ 2 µg/mL) Intermediate (16 µg/mL) <sup>4</sup> Sensitive (8 µg/mL) Sensitive (≤ 0.25 µg/mL) Sensitive (≤ 0.25 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 0.5 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (4 µg/mL)
<b>Genotypic Analysis</b> Sequencing of 16S ribosomal RNA gene (~ 1410 base pairs)	≥ 99% sequence identity to <i>A. baumannii</i> , strain MRSN 32076 (GenBank: VFHM01000076.1)	99.9% sequence identity to <i>A. baumannii</i> , strain MRSN 32076 (GenBank: VFHM01000076.1)
<b>Purity</b> 7 days at 37°C in an aerobic atmosphere with and without 5% CO <sub>2</sub> on Tryptic Soy agar	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology

TEST	SPECIFICATIONS	RESULTS
Viability	Growth	Growth

<sup>1</sup>Growth at 44°C differentiates *A. baumannii* from *A. calcoaceticus* and *A. pittii*, which do not grow at 44°C.

<sup>2</sup>Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S28 (2018)

<sup>3</sup>Antibiotic susceptibility was tested using a combination of VITEK<sup>®</sup>2 GN82, Sensititre™ GNX2F AST and E-test strips.

<sup>4</sup>Susceptibility result for this antibiotic is within one doubling dilution of specification, which is considered an equivalent result.

Figure 1: Colony Morphology



/Heather Couch/  
Heather Couch

Program Manager or designee, ATCC Federal Solutions

23 JUL 2021

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**Acinetobacter baumannii, Strain MRSN 32104**

**Catalog No. NR-52229**

This reagent is the tangible property of the U.S. Government.

**Product Description:**

*Acinetobacter baumannii* (*A. baumannii*), strain MRSN 32104 was isolated in 2006 from a human respiratory sample in Europe as part of a global surveillance program. NR-52229 was deposited as resistant to amikacin, ceftriaxone, ciprofloxacin, gentamicin, imipenem, levofloxacin, meropenem, tetracycline, tobramycin and trimethoprim/sulfamethoxazole, sensitive to ceftazidime and colistin, and intermediately resistant to cefepime and ampicillin/sulbactam. NR-52229 lot 70039055 was produced by inoculation of the deposited material into Tryptic Soy broth and grown for 1 day at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar kolles, which were grown for 1 day at 37°C in an aerobic atmosphere to produce this lot. Quality control testing was completed under propagation conditions unless otherwise noted.

**Lot: 70039055**

**Manufacturing Date: 11SEP2020**

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TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis</b> Cellular morphology Colony morphology  Growth at 44°C ± 2°C <sup>1</sup> 1 day in an aerobic atmosphere on Tryptic Soy agar  Motility Remel™ Motility Test Medium w/TTC Indicator for 1 day at 37°C in an aerobic atmosphere  VITEK® MS (MALDI-TOF)	Gram-negative rods Report results  Growth  Report results  <i>A. baumannii</i>	Gram-negative rods Circular, convex, entire, smooth and cream (Figure 1) Growth  Motile  <i>A. baumannii</i> (99.9%)
<b>Antibiotic Susceptibility Profile<sup>2,3</sup></b> Amikacin Ampicillin/sulbactam Cefepime Ceftriaxone Ceftazidime Ciprofloxacin Colistin Gentamicin Imipenem Levofloxacin Meropenem Trimethoprim/sulfamethoxazole Tobramycin Tetracycline	Resistant Intermediate Intermediate Resistant Sensitive Resistant Sensitive Resistant Resistant Resistant Resistant Resistant Resistant Resistant Resistant Resistant	Resistant (96 to 128 µg/mL) Intermediate (12 µg/mL) Intermediate (16 to 24 µg/mL) Resistant (≥ 64 µg/mL) Intermediate (16 µg/mL) <sup>4</sup> Resistant (≥ 4 µg/mL) Sensitive (≤ 0.25 µg/mL) Resistant (≥ 16 µg/mL) Resistant (> 8 µg/mL) Resistant (12 to 16 µg/mL) Resistant (> 8 µg/mL) Resistant (4 µg/mL) Resistant (≥ 256 µg/mL) Resistant (≥ 256 µg/mL)
<b>Genotypic Analysis</b> Sequencing of 16S ribosomal RNA gene (~ 1480 base pairs)	≥ 99% sequence identity to <i>A. baumannii</i> , strain MRSN 32104 (GenBank: VFHFL01000097.1)	100% sequence identity to <i>A. baumannii</i> , strain MRSN 32104 (GenBank: VFHFL01000097.1)

TEST	SPECIFICATIONS	RESULTS
<b>Purity</b> 12 days at 37°C in an aerobic atmosphere with and without 5% CO <sub>2</sub> on Tryptic Soy agar	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology
<b>Viability</b>	Growth	Growth

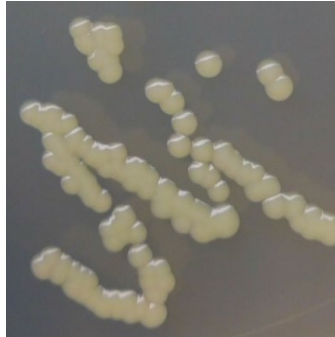
<sup>1</sup>Growth at 44°C differentiates *A. baumannii* from *A. calcoaceticus* and *A. pittii*, which do not grow at 44°C.

<sup>2</sup>Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S28 (2018)

<sup>3</sup>Antibiotic susceptibility was tested using a combination of VITEK<sup>®</sup>2 GN82, Sensititre GNX2F AST and E-test strips.

<sup>4</sup>The susceptibility result for this antibiotic is within one doubling dilution of specification, which is considered an equivalent result.

Figure 1: Colony Morphology



/Heather Couch/

Heather Couch

27 JAN 2022

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***Acinetobacter baumannii*, Strain MRSN 32108**

**Catalog No. NR-52230**

This reagent is the tangible property of the U.S. Government.

**Product Description:**

*Acinetobacter baumannii* (*A. baumannii*), strain MRSN 32108 was isolated in 2006 from a human wound sample in Europe as part of a global surveillance program. *A. baumannii*, strain MRSN 32108 was deposited as sensitive to colistin, cefepime, imipenem and meropenem, intermediately resistant to ampicillin/sulbactam and resistant to amikacin, ceftazidime, ceftriaxone, ciprofloxacin, gentamicin, levofloxacin, trimethoprim/sulfamethoxazole, tetracycline and tobramycin. NR-52230 lot 70039370 was produced by inoculation of the deposited material into Tryptic Soy broth and grown for 1 day at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar kolles, which were grown for 1 day at 37°C in an aerobic atmosphere to produce this lot. Quality control testing was completed under propagation conditions unless otherwise noted.

**Lot: 70039370**

**Manufacturing Date: 30SEP2020**

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TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis</b> Cellular morphology Colony morphology  Growth at 44°C ± 2°C <sup>1</sup> 1 day in an aerobic atmosphere on Tryptic Soy agar Motility RemeI™ Motility Test Medium w/TTC Indicator for 1 day at 37°C in an aerobic atmosphere VITEK® MS (MALDI-TOF)	Gram-negative rods Report results  Growth  Report results  <i>A. baumannii</i>	Gram-negative rods Circular, convex, entire, smooth and cream (Figure 1) Growth  Non-motile  <i>A. baumannii</i> (99.9%)
<b>Antibiotic Susceptibility Profile<sup>2,3</sup></b> Amikacin Ampicillin/sulbactam Cefepime Ceftriaxone Ceftazidime Ciprofloxacin Colistin Gentamicin Imipenem Levofloxacin Meropenem Trimethoprim/sulfamethoxazole Tobramycin Tetracycline	Resistant Intermediate Sensitive Resistant Resistant Resistant Resistant Sensitive Resistant Sensitive Resistant Sensitive Resistant Resistant Resistant	Resistant (> 256 µg/mL) Intermediate (16 µg/mL) Sensitive (8 µg/mL) Resistant (> 32 µg/mL) Resistant (32 µg/mL) Resistant (≥ 4 µg/mL) Sensitive (≤ 0.5 µg/mL) Resistant (≥ 16 µg/mL) Sensitive (2 µg/mL) Intermediate (4 µg/mL) <sup>4</sup> Sensitive (≤ 1 µg/mL) Resistant (> 4 µg/mL) Resistant (192 µg/mL) Resistant (> 256 µg/mL)
<b>Genotypic Analysis</b> Sequencing of 16S ribosomal RNA gene (~ 1470 base pairs)	≥ 99% sequence identity to <i>A. baumannii</i> , strain MRSN 32108 (GenBank: VFHK01000061.1)	100% sequence identity to <i>A. baumannii</i> , strain MRSN 32108 (GenBank: VFHK01000061.1)

TEST	SPECIFICATIONS	RESULTS
<b>Purity</b> 7 days at 37°C in an aerobic atmosphere with and without 5% CO <sub>2</sub> on Tryptic Soy agar	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology
<b>Viability</b>	Growth	Growth

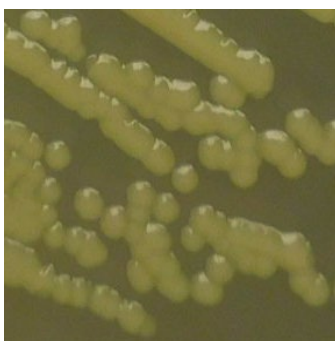
<sup>1</sup>Growth at 44°C differentiates *A. baumannii* from *A. calcoaceticus* and *A. pittii*, which do not grow at 44°C.

<sup>2</sup>Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S28 (2018)

<sup>3</sup>Antibiotic susceptibility was tested using a combination of VITEK2 GN82, Sensititre GNX2F AST and E-test strips.

<sup>4</sup>The susceptibility result for this antibiotic is within one doubling dilution of specification, which is considered an equivalent result.

Figure 1: Colony Morphology



/Heather Couch/  
Heather Couch

Program Manager or designee, ATCC Federal Solutions

05 FEB 2022

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**Acinetobacter baumannii, Strain MRSN 32142**

**Catalog No. NR-52231**

This reagent is the tangible property of the U.S. Government.

**Product Description:**

*Acinetobacter baumannii* (*A. baumannii*), strain MRSN 32142 was isolated in 2006 from a human wound sample in Europe as part of a global surveillance program. *A. baumannii*, strain MRSN 32142 was deposited as sensitive to amikacin, ampicillin/sulbactam, ciprofloxacin, colistin, imipenem, levofloxacin, meropenem and tetracycline and resistant to cefepime, ceftazidime, ceftriaxone, gentamicin, trimethoprim/sulfamethoxazole and tobramycin. NR-52231 lot 70041136 was produced by inoculation of the deposited material into Tryptic Soy broth and grown for 1 day at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar kolles, which were grown for 1 day at 37°C in an aerobic atmosphere to produce this lot. Quality control testing was completed under propagation conditions unless otherwise noted.

**Lot: 70041136**

**Manufacturing Date: 06JAN2021**

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TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis</b> Cellular morphology Colony morphology  Growth at 44°C ± 2°C <sup>1</sup> 1 day in an aerobic atmosphere on Tryptic Soy agar Motility Remel™ Motility Test Medium w/TTC Indicator for 1 day at 37°C in an aerobic atmosphere VITEK® MS (MALDI-TOF)	Gram-negative rods Report results  Growth  Report results  <i>A. baumannii</i>	Gram-negative rods Circular, convex, entire, smooth and cream Growth  Motile  <i>A. baumannii</i> (99.9%)
<b>Antibiotic Susceptibility Profile<sup>2,3</sup></b> Amikacin Ampicillin/sulbactam Cefepime Ceftriaxone Ceftazidime Ciprofloxacin Colistin Gentamicin Imipenem Levofloxacin Meropenem Trimethoprim/sulfamethoxazole Tobramycin Tetracycline	Sensitive Sensitive Resistant Resistant Resistant Sensitive Sensitive Sensitive Resistant Sensitive Sensitive Sensitive Resistant Resistant Sensitive	Sensitive (≤ 4 µg/mL) Sensitive (8 µg/mL) Resistant (> 256 µg/mL) Resistant (> 32 µg/mL) Resistant (≥ 64 µg/mL) Sensitive (≤ 0.25 µg/mL) Sensitive (≤ 0.25 µg/mL) Resistant (≥ 16 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (2 µg/mL) Sensitive (≤ 1 µg/mL) Resistant (4 µg/mL) Intermediate (8 to 12 µg/mL) <sup>4</sup> Sensitive (3 µg/mL)
<b>Genotypic Analysis</b> Sequencing of 16S ribosomal RNA gene (~ 1470 base pairs)	≥ 99% sequence identity to <i>A. baumannii</i> , strain MRSN 32142 (GenBank: VHFJ01000099.1)	99.9% sequence identity to <i>A. baumannii</i> , strain MRSN 32142 (GenBank: VHFJ01000099.1)



TEST	SPECIFICATIONS	RESULTS
<b>Purity</b> 7 days at 37°C in an aerobic atmosphere with and without 5% CO <sub>2</sub> on Tryptic Soy agar	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology
<b>Viability</b>	Growth	Growth

<sup>1</sup>Growth at 44°C differentiates *A. baumannii* from *A. calcoaceticus* and *A. pittii*, which do not grow at 44°C.

<sup>2</sup>Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S28 (2018)

<sup>3</sup>Antibiotic susceptibility was tested using a combination of VITEK<sup>®</sup>2 GN82, Sensititre GNX2F AST and E-test strips.

<sup>4</sup>The susceptibility result for this antibiotic is within one doubling dilution of specification, which is considered an equivalent result.

/Heather Couch/

Heather Couch

05 FEB 2022

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**Acinetobacter baumannii, Strain MRSN 32304**

**Catalog No. NR-52232**

This reagent is the tangible property of the U.S. Government.

**Product Description:**

*Acinetobacter baumannii* (*A. baumannii*), strain MRSN 32304 was isolated in 2015 from a human sterile body fluid sample in the United States as part of a global surveillance program. NR-52232 was deposited as sensitive to amikacin, ampicillin/sulbactam, cefepime, ceftazidime, ceftriaxone, ciprofloxacin, colistin, gentamicin, imipenem, levofloxacin, meropenem, tetracycline, tobramycin and trimethoprim/sulfamethoxazole. NR-52232 lot 70042854 was produced by inoculation of the deposited material into Tryptic Soy broth and grown for 1 day at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar kolles, which were grown for 1 day at 37°C in an aerobic atmosphere to produce this lot. Quality control testing was completed under propagation conditions unless otherwise noted.

**Lot: 70042854**

**Manufacturing Date: 17MAR2021**

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TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis</b> Cellular morphology Colony morphology  Growth at 44°C ± 2°C <sup>1</sup> 1 day in an aerobic atmosphere on Tryptic Soy agar Motility BBL™ Motility Test Medium w/TTC Indicator for 1 day at 37°C in an aerobic atmosphere VITEK® MS (MALDI-TOF)	Gram-negative rods Report results  Growth  Report results  <i>A. baumannii</i>	Gram-negative rods Circular, convex, entire, smooth and cream (Figure 1) Growth  Motile  <i>A. baumannii</i> (99.9%)
<b>Antibiotic Susceptibility Profile<sup>2,3</sup></b> Amikacin Ampicillin/sulbactam Cefepime Ceftriaxone Ceftazidime Ciprofloxacin Colistin Gentamicin Imipenem Levofloxacin Meropenem Trimethoprim/sulfamethoxazole Tobramycin Tetracycline	Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive	Sensitive (4 µg/mL) Sensitive (1.0 to 1.5 µg/mL) Sensitive (≤ 2 µg/mL) Intermediate (16 µg/mL) <sup>4</sup> Sensitive (4 µg/mL) Sensitive (≤ 0.25 µg/mL) Sensitive (≤ 0.25 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 0.5 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (4 to 6 µg/mL)
<b>Genotypic Analysis</b> Sequencing of 16S ribosomal RNA gene (~ 1460 base pairs)	≥ 99% sequence identity to <i>A. baumannii</i> , strain MRSN 32304 (GenBank: VFHI01000126.1)	100% sequence identity to <i>A. baumannii</i> , strain MRSN 32304 (GenBank: VFHI01000126.1)
<b>Purity</b> 7 days at 37°C in an aerobic atmosphere with and without 5% CO <sub>2</sub> on Tryptic Soy agar	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology

TEST	SPECIFICATIONS	RESULTS
Viability	Growth	Growth

<sup>1</sup>Growth at 44°C differentiates *A. baumannii* from *A. calcoaceticus* and *A. pittii*, which do not grow at 44°C.

<sup>2</sup>Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S28 (2018)

<sup>3</sup>Antibiotic susceptibility was tested using a combination of VITEK<sup>®</sup>2 GN82, Sensititre GNX2F AST and E-test strips.

<sup>4</sup>The susceptibility result for this antibiotic is within one doubling dilution of specification, which is considered an equivalent result.

Figure 1: Colony Morphology



/Heather Couch/  
Heather Couch

Program Manager or designee, ATCC Federal Solutions

28 JAN 2022

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**Acinetobacter baumannii, Strain MRSN 32797**

**Catalog No. NR-52233**

This reagent is the tangible property of the U.S. Government.

**Product Description:**

*Acinetobacter baumannii* (*A. baumannii*), strain MRSN 32797 was isolated in 2005 from a human in Europe as part of a global surveillance program. *A. baumannii*, strain MRSN 32797 was deposited as sensitive to amikacin, ceftazidime, ciprofloxacin, colistin, cefepime, gentamicin, imipenem, levofloxacin, meropenem, tobramycin, tetracycline and ampicillin/sulbactam, resistant to trimethoprim/sulfamethoxazole and intermediately resistant to ceftriaxone. NR-52233 lot 70042856 was produced by inoculation of the deposited material into Tryptic Soy broth and grown for 1 day at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar kolles, which were grown for 1 day at 37°C in an aerobic atmosphere to produce this lot. Quality control testing was completed under propagation conditions unless otherwise noted.

**Lot: 70042856**

**Manufacturing Date: 17MAR2021**

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TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis</b> Cellular morphology Colony morphology  Growth at 44°C ± 2°C <sup>1</sup> 1 day in an aerobic atmosphere on Tryptic Soy agar Motility BBL™ Motility Test Medium w/TTC Indicator for 1 day at 37°C in an aerobic atmosphere VITEK® MS (MALDI-TOF)	Gram-negative rods Report results  Growth  Report results  <i>A. baumannii</i>	Gram-negative rods Circular, convex, entire, smooth and cream (Figure 1) Growth  Motile  <i>A. baumannii</i> (99.9%)
<b>Antibiotic Susceptibility Profile<sup>2,3</sup></b> Amikacin Ampicillin/sulbactam Cefepime Ceftriaxone Ceftazidime Ciprofloxacin Colistin Gentamicin Imipenem Levofloxacin Meropenem Trimethoprim/sulfamethoxazole Tobramycin Tetracycline	Sensitive Sensitive Sensitive Intermediate Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Resistant Sensitive Sensitive	Sensitive (≤ 4 µg/mL) Sensitive (1 µg/mL) Sensitive (≤ 2 µg/mL) Intermediate (16 µg/mL) Sensitive (4 µg/mL) Sensitive (≤ 0.25 µg/mL) Sensitive (≤ 0.25 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Resistant (> 4 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (2 µg/mL)
<b>Genotypic Analysis</b> Sequencing of 16S ribosomal RNA gene (~ 1470 base pairs)	≥ 99% sequence identity to <i>A. baumannii</i> , strain MRSN 32797 (GenBank: VHFH01000049.1)	99.9% sequence identity to <i>A. baumannii</i> , strain MRSN 32797 (GenBank: VHFH01000049.1)
<b>Purity</b> 7 days at 37°C in an aerobic atmosphere with and without 5% CO <sub>2</sub> on Tryptic Soy agar	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology

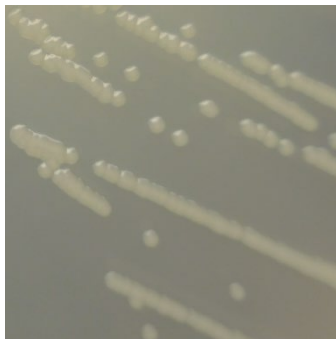
TEST	SPECIFICATIONS	RESULTS
Viability	Growth	Growth

<sup>1</sup>Growth at 44°C differentiates *A. baumannii* from *A. calcoaceticus* and *A. pittii*, which do not grow at 44°C.

<sup>2</sup>Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S28 (2018)

<sup>3</sup>Antibiotic susceptibility was tested using a combination of VITEK<sup>®</sup>2 GN82, Sensititre™ GNX2F AST and E-test strips.

Figure 1: Colony Morphology



/Heather Couch/  
Heather Couch

03 AUG 2021

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**Acinetobacter baumannii, Strain MRSN 32842**

**Catalog No. NR-52234**

This reagent is the tangible property of the U.S. Government.

**Product Description:**

*Acinetobacter baumannii* (*A. baumannii*), strain MRSN 32842 was isolated in 2005 from a human wound sample in Europe as part of a global surveillance program. *A. baumannii*, strain MRSN 32842 was deposited as sensitive to amikacin, ampicillin/sulbactam, cefepime, ceftazidime, ceftriaxone, ciprofloxacin, colistin, imipenem, levofloxacin, meropenem, tetracycline, trimethoprim/sulfamethoxazole and tobramycin and intermediately resistant to gentamicin. NR-52234 lot 70042858 was produced by inoculation of the deposited material into Tryptic Soy broth and grown for 1 day at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar kolles, which were grown for 1 day at 37°C in an aerobic atmosphere to produce this lot. Quality control testing was completed under propagation conditions unless otherwise noted.

**Lot: 70042858**

**Manufacturing Date: 17MAR2021**

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TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis</b> Cellular morphology Colony morphology  Growth at 44°C ± 2°C <sup>1</sup> 1 day in an aerobic atmosphere on Tryptic Soy agar Motility BBL™ Motility Test Medium w/TTC Indicator for 1 day at 37°C in an aerobic atmosphere VITEK® MS (MALDI-TOF)	Gram-negative rods Report results  Growth  Report results  <i>A. baumannii</i>	Gram-negative rods Circular, convex, entire, smooth and cream (Figure 1) Growth  Motile  <i>A. baumannii</i> (99.9%)
<b>Antibiotic Susceptibility Profile<sup>2,3</sup></b> Amikacin Ampicillin/sulbactam Cefepime Ceftriaxone Ceftazidime Ciprofloxacin Colistin Gentamicin Imipenem Levofloxacin Meropenem Trimethoprim/sulfamethoxazole Tobramycin Tetracycline	Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Intermediate Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive	Sensitive (≤ 16 µg/mL) Sensitive (1.5 µg/mL) Sensitive (≤ 2 µg/mL) Intermediate (12 to 16 µg/mL) <sup>4</sup> Sensitive (4 µg/mL) Sensitive (≤ 0.25 µg/mL) Sensitive (0.5 µg/mL) Sensitive (≤ 3 µg/mL) <sup>5</sup> Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 0.5 µg/mL) Sensitive (≤ 1 µg/mL) Intermediate (6 µg/mL) <sup>4</sup>
<b>Genotypic Analysis</b> Sequencing of 16S ribosomal RNA gene (~ 1470 base pairs)	≥ 99% sequence identity to <i>A. baumannii</i> , strain MRSN 32842 (GenBank: VFHG01000046.1)	100% sequence identity to <i>A. baumannii</i> , strain MRSN 32842 (GenBank: VFHG01000046.1)
<b>Purity</b> 7 days at 37°C in an aerobic atmosphere with and without 5% CO <sub>2</sub> on Tryptic Soy agar	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology

TEST	SPECIFICATIONS	RESULTS
Viability	Growth	Growth

<sup>1</sup>Growth at 44°C differentiates *A. baumannii* from *A. calcoaceticus* and *A. pittii*, which do not grow at 44°C.

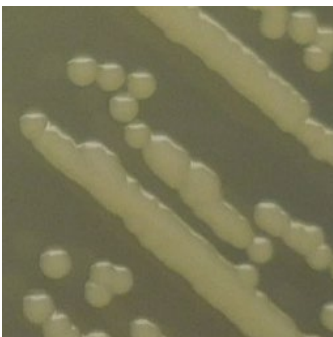
<sup>2</sup>Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S28 (2018)

<sup>3</sup>Antibiotic susceptibility was tested using a combination of VITEK<sup>®</sup>2 GN82, Sensititre GNX2F AST and E-test strips.

<sup>4</sup>The susceptibility result for this antibiotic is within one doubling dilution of specification, which is considered an equivalent result.

<sup>5</sup>*A. baumannii*, strain MRSN 32842 was deposited as being intermediately resistant to gentamicin. Repeated antibiotic susceptibility testing determined that for strain MRSN 32842, the gentamicin MIC is  $\leq 3 \mu\text{g per mL}$ , which is interpreted as sensitive. Testing was performed in duplicate.

Figure 1: Colony Morphology



/Heather Couch/  
Heather Couch

29 JAN 2022

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**Acinetobacter baumannii, Strain MRSN 32865**

**Catalog No. NR-52235**

This reagent is the tangible property of the U.S. Government.

**Product Description:**

*Acinetobacter baumannii* (*A. baumannii*), strain MRSN 32865 was isolated in 2007 from a human wound sample in Europe as part of a global surveillance program. *A. baumannii*, strain MRSN 32865 was deposited as sensitive to colistin, imipenem, ampicillin/sulbactam, meropenem and tetracycline and resistant to amikacin, ceftazidime, ceftriaxone, cefepime, ciprofloxacin, gentamicin, levofloxacin, tobramycin and trimethoprim/sulfamethoxazole. NR-52235 lot 70041140 was produced by inoculation of the deposited material into Tryptic Soy broth and grown for 1 day at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar kolles, which were grown for 1 day at 37°C in an aerobic atmosphere to produce this lot. Quality control testing was completed under propagation conditions unless otherwise noted.

**Lot: 70041140**

**Manufacturing Date: 13JAN2021**

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TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis</b> Cellular morphology Colony morphology  Growth at 44°C ± 2°C <sup>1</sup> 1 day in an aerobic atmosphere on Tryptic Soy agar Motility BBL™ Motility Test Medium w/TTC Indicator for 1 day at 37°C in an aerobic atmosphere VITEK® MS (MALDI-TOF)	Gram-negative rods Report results  Growth  Report results  <i>A. baumannii</i>	Gram-negative rods Circular, convex, entire, smooth and cream (Figure 1) Growth  Motile  <i>A. baumannii</i> (99.9%)
<b>Antibiotic Susceptibility Profile<sup>2,3</sup></b> Amikacin Ampicillin/sulbactam Cefepime Ceftriaxone Ceftazidime Ciprofloxacin Colistin Gentamicin Imipenem Levofloxacin Meropenem Trimethoprim/sulfamethoxazole Tobramycin Tetracycline	Resistant Sensitive Resistant Resistant Resistant Resistant Resistant Sensitive Sensitive Resistant Sensitive Resistant Resistant Sensitive	Resistant (> 256 µg/mL) Sensitive (6 µg/mL) Resistant (64 µg/mL) Resistant (≥ 64 µg/mL) Resistant (≥ 64 µg/mL) Resistant (≥ 4 µg/mL) Sensitive (≤ 0.25 µg/mL) Resistant (≥ 16 µg/mL) Sensitive (≤ 1 µg/mL) Resistant (8 µg/mL) Sensitive (2 µg/mL) Resistant (> 4 µg/mL) Resistant (≥ 16 µg/mL) Resistant (12 µg/mL) <sup>4</sup>
<b>Genotypic Analysis</b> Sequencing of 16S ribosomal RNA gene (~ 1470 base pairs)	≥ 99% sequence identity to <i>A. baumannii</i> , strain MRSN 32865 (GenBank: VHFF01000098.1)	99.8% sequence identity to <i>A. baumannii</i> , strain MRSN 32865 (GenBank: VHFF01000098.1)
<b>Purity</b> 7 days at 37°C in an aerobic atmosphere with and without 5% CO <sub>2</sub> on Tryptic Soy agar	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology



TEST	SPECIFICATIONS	RESULTS
Viability	Growth	Growth

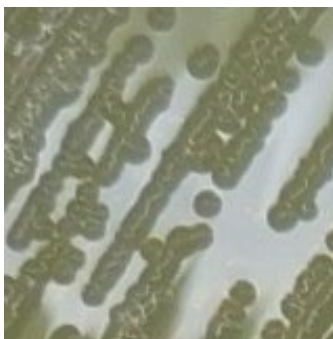
<sup>1</sup>Growth at 44°C differentiates *A. baumannii* from *A. calcoaceticus* and *A. pittii*, which do not grow at 44°C.

<sup>2</sup>Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S28 (2018)

<sup>3</sup>Antibiotic susceptibility was tested using a combination of VITEK<sup>®</sup>2 GN82, Sensititre GNX2F AST and E-test strips.

<sup>4</sup>*A. baumannii*, strain MRSN 32865 was deposited as being sensitive to tetracycline. Repeated antibiotic susceptibility testing determined that for strain MRSN 32865, the tetracycline MIC is 12 µg per mL, which is interpreted as resistant. Testing was performed in duplicate.

Figure 1: Colony Morphology



/Heather Couch/  
Heather Couch

30 JAN 2022

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**Acinetobacter baumannii, Strain MRSN 32866**

**Catalog No. NR-52236**

This reagent is the tangible property of the U.S. Government.

**Product Description:**

*Acinetobacter baumannii* (*A. baumannii*), strain MRSN 32866 was isolated in 2007 from a human sample in Europe as part of a global surveillance program. *A. baumannii*, strain MRSN 32866 was deposited as sensitive to colistin, imipenem, meropenem and tobramycin and resistant to amikacin, ampicillin/sulbactam, cefepime, ceftazidime, ceftriaxone, ciprofloxacin, gentamicin, levofloxacin, tetracycline and trimethoprim/sulfamethoxazole. NR-52236 lot 70039372 was produced by inoculation of the deposited material into Tryptic Soy broth and grown for 1 day at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar kolles, which were grown for 1 day at 37°C in an aerobic atmosphere to produce this lot. Quality control testing was completed under propagation conditions unless otherwise noted.

**Lot: 70039372**

**Manufacturing Date: 30SEP2020**

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TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis</b> Cellular morphology Colony morphology  Growth at 44°C ± 2°C <sup>1</sup> 1 day in an aerobic atmosphere on Tryptic Soy agar Motility Remel™ Motility Test Medium w/TTC Indicator for 1 day at 37°C in an aerobic atmosphere VITEK® MS (MALDI-TOF)	Gram-negative rods Report results  Growth  Report results  <i>A. baumannii</i>	Gram-negative rods Circular, convex, entire, smooth and cream (Figure 1) Growth  Non-motile  <i>A. baumannii</i> (99.9%)
<b>Antibiotic Susceptibility Profile<sup>2,3</sup></b> Amikacin Ampicillin/sulbactam Cefepime Ceftriaxone Ceftazidime Ciprofloxacin Colistin Gentamicin Imipenem Levofloxacin Meropenem Trimethoprim/sulfamethoxazole Tobramycin Tetracycline	Resistant Resistant Resistant Resistant Resistant Resistant Sensitive Resistant Sensitive Resistant Sensitive Resistant Sensitive Resistant Sensitive Resistant	Resistant (> 256 µg/mL) Resistant (> 256 µg/mL) Resistant (> 256 µg/mL) Resistant (> 64 µg/mL) Resistant (≥ 64 µg/mL) Resistant (≥ 4 µg/mL) Sensitive (≤ 0.25 µg/mL) Resistant (≥ 16 µg/mL) Inconclusive (2 to 8 µg/mL) <sup>4</sup> Resistant (8 µg/mL) Resistant (8 µg/mL) <sup>5</sup> Resistant (> 4µg/mL) Sensitive (≤ 1 µg/mL) Resistant (> 256 µg/mL)
<b>Genotypic Analysis</b> Sequencing of 16S ribosomal RNA gene (~ 1480 base pairs)	≥ 99% sequence identity to <i>A. baumannii</i> , strain MRSN 32866 (GenBank: VFHE01000091.1)	100% sequence identity to <i>A. baumannii</i> , strain MRSN 32866 (GenBank: VFHE01000091.1)
<b>Purity</b> 7 days at 37°C in an aerobic atmosphere with and without 5% CO <sub>2</sub> on Tryptic Soy agar	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology

TEST	SPECIFICATIONS	RESULTS
Viability	Growth	Growth

<sup>1</sup>Growth at 44°C differentiates *A. baumannii* from *A. calcoaceticus* and *A. pittii*, which do not grow at 44°C.

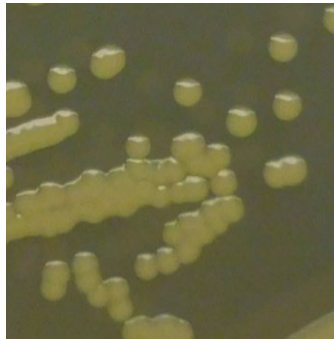
<sup>2</sup>Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S28 (2018)

<sup>3</sup>Antibiotic susceptibility was tested using a combination of VITEK<sup>®</sup>2 GN82, Sensititre GNX2F AST and E-test strips.

<sup>4</sup>*A. baumannii*, strain MRSN 32866 was deposited as being sensitive to imipenem. Repeated antibiotic susceptibility testing determined that for strain MRSN 32866, the imipenem MICs are 2 µg/mL and > 8 µg/mL, which are interpreted as sensitive and resistant, respectively.

<sup>5</sup>*A. baumannii*, strain MRSN 32866 was deposited as sensitive to meropenem, but showed a MIC of 8 µg/mL (interpreted as resistant) for meropenem during QC testing. Testing was performed in duplicate.

Figure 1: Colony Morphology



/Heather Couch/  
Heather Couch

Program Manager or designee, ATCC Federal Solutions

31 JAN 2022

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**Acinetobacter baumannii, Strain MRSN 32875**

**Catalog No. NR-52237**

This reagent is the tangible property of the U.S. Government.

**Product Description:**

*Acinetobacter baumannii* (*A. baumannii*), strain MRSN 32875 was isolated in 2007 from a human in Europe as part of a global surveillance program. NR-52237 was deposited as sensitive to amikacin, ampicillin/sulbactam, cefepime, ceftazidime, ceftriaxone, colistin, ciprofloxacin, gentamicin, imipenem, levofloxacin, meropenem, tetracycline, tobramycin and trimethoprim/sulfamethoxazole. NR-52237 lot 70042860 was produced by inoculation of the deposited material into Tryptic Soy broth and grown for 1 day at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar kolles, which were grown for 1 day at 37°C in an aerobic atmosphere to produce this lot. Quality control testing was completed under propagation conditions unless otherwise noted.

**Lot: 70042860**

**Manufacturing Date: 19MAR2021**

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TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis</b> Cellular morphology Colony morphology  Growth at 44°C ± 2°C <sup>1</sup> 1 day in an aerobic atmosphere on Tryptic Soy agar Motility Remel™ Motility Test Medium w/TTC Indicator for 1 day at 37°C in an aerobic atmosphere VITEK® MS (MALDI-TOF)	Gram-negative rods Report results  Growth  Report results  <i>A. baumannii</i>	Gram-negative rods Circular, convex, entire, smooth and cream (Figure 1) Growth  Non-motile  <i>A. baumannii</i> (99.9%)
<b>Antibiotic Susceptibility Profile<sup>2,3</sup></b> Amikacin Ampicillin/sulbactam Cefepime Ceftriaxone Ceftazidime Ciprofloxacin Colistin Gentamicin Imipenem Levofloxacin Meropenem Trimethoprim/sulfamethoxazole Tobramycin Tetracycline	Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive	Sensitive (8 µg/mL) Sensitive (1.5 µg/mL) Sensitive (3 µg/mL) Sensitive (8 µg/mL) Sensitive (4 µg/mL) Sensitive (≤ 0.25 µg/mL) Sensitive (≤ 0.5 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 0.5 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (3 µg/mL)
<b>Genotypic Analysis</b> Sequencing of 16S ribosomal RNA gene (~ 1470 base pairs)	≥ 99% sequence identity to <i>A. baumannii</i> , strain MRSN 32875 (GenBank: VFHD01000050.1)	100% sequence identity to <i>A. baumannii</i> , strain MRSN 32875 (GenBank: VFHD01000050.1)
<b>Purity</b> 7 days at 37°C in an aerobic atmosphere with and without 5% CO <sub>2</sub> on Tryptic Soy agar	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology

TEST	SPECIFICATIONS	RESULTS
Viability	Growth	Growth

<sup>1</sup>Growth at 44°C differentiates *A. baumannii* from *A. calcoaceticus* and *A. pittii*, which do not grow at 44°C.

<sup>2</sup>Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S28 (2018)

<sup>3</sup>Antibiotic susceptibility was tested using a combination of VITEK<sup>®</sup>2 GN82, Sensititre GNX2F AST and E-test strips.

Figure 1: Colony Morphology



/Heather Couch/  
Heather Couch

31 JAN 2022

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**Acinetobacter baumannii, Strain MRSN 32892**

**Catalog No. NR-52238**

This reagent is the tangible property of the U.S. Government.

**Product Description:**

*Acinetobacter baumannii* (*A. baumannii*), strain MRSN 32892 was isolated in 2008 from a human sample in Europe as part of a global surveillance program. *A. baumannii*, strain MRSN 32892 was deposited as sensitive to ceftazidime, ciprofloxacin, colistin, cefepime, imipenem, levofloxacin, meropenem, ampicillin/sulbactam and tetracycline and resistant to amikacin, ceftriaxone, gentamicin, tobramycin and trimethoprim/sulfamethoxazole. NR-52238 lot 70041141 was produced by inoculation of the deposited material into Tryptic Soy broth and grown for 1 day at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar kolles, which were grown for 1 day at 37°C in an aerobic atmosphere to produce this lot. Quality control testing was completed under propagation conditions unless otherwise noted.

**Lot: 70041141**

**Manufacturing Date: 13JAN2021**

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TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis</b> Cellular morphology Colony morphology  Growth at 44°C ± 2°C <sup>1</sup> 1 day in an aerobic atmosphere on Tryptic Soy agar  Motility BBL™ Motility Test Medium w/TTC Indicator for 1 day at 37°C in an aerobic atmosphere  VITEK® MS (MALDI-TOF)	Gram-negative rods Report results  Growth  Report results  <i>A. baumannii</i>	Gram-negative rods Circular, convex, entire, smooth and cream (Figure 1) Growth  Non-motile  <i>A. baumannii</i> (99.9%)
<b>Antibiotic Susceptibility Profile<sup>2,3</sup></b> Amikacin Ampicillin/sulbactam Cefepime Ceftriaxone Ceftazidime Ciprofloxacin Colistin Gentamicin Imipenem Levofloxacin Meropenem Trimethoprim/sulfamethoxazole Tobramycin Tetracycline	Resistant Sensitive Sensitive Resistant Sensitive Sensitive Sensitive Sensitive Resistant Sensitive Sensitive Sensitive Resistant Resistant Sensitive	Resistant (> 256 µg/mL) Sensitive (1.5 µg/mL) Sensitive (6 µg/mL) Resistant (≥ 64 µg/mL) Intermediate (16 µg/mL) <sup>4</sup> Sensitive (≤ 0.5 µg/mL) Sensitive (≤ 0.25 µg/mL) Resistant (≥ 16 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Resistant (4 µg/mL) Resistant (≥ 16 µg/mL) Intermediate (12 µg/mL) <sup>5</sup>
<b>Genotypic Analysis</b> Sequencing of 16S ribosomal RNA gene (~ 1470 base pairs)	≥ 99% sequence identity to <i>A. baumannii</i> , strain MRSN 32892 (GenBank: VFHC01000091.1)	100% sequence identity to <i>A. baumannii</i> , strain MRSN 32892 (GenBank: VFHC01000091.1)
<b>Purity</b> 7 days at 37°C in an aerobic atmosphere with and without 5% CO <sub>2</sub> on Tryptic Soy agar	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology

TEST	SPECIFICATIONS	RESULTS
Viability	Growth	Growth

<sup>1</sup>Growth at 44°C differentiates *A. baumannii* from *A. calcoaceticus* and *A. pittii*, which do not grow at 44°C.

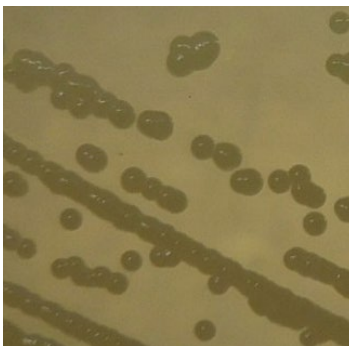
<sup>2</sup>Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S28 (2018)

<sup>3</sup>Antibiotic susceptibility was tested using a combination of VITEK2 GN82, Sensititre GNX2F AST and E-test strips.

<sup>4</sup>The susceptibility result for this antibiotic is within one doubling dilution of specification, which is considered an equivalent result.

<sup>5</sup>*A. baumannii*, strain MRSN 32892 was deposited as sensitive to tetracycline, but showed a MIC of 12 µg/mL (interpreted as intermediate) for tetracycline during QC testing. Testing was performed in duplicate.

Figure 1: Colony Morphology



/Heather Couch/

Heather Couch

Program Manager or designee, ATCC Federal Solutions

16 NOV 2021

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**Acinetobacter baumannii, Strain MRSN 32915**

**Catalog No. NR-52239**

This reagent is the tangible property of the U.S. Government.

**Product Description:**

*Acinetobacter baumannii* (*A. baumannii*), strain MRSN 32915 was isolated in 2008 from a wound specimen in Europe as part of a global surveillance program. NR-52239 was deposited as sensitive to colistin, resistant to amikacin, ceftazidime, ciprofloxacin, ceftriaxone, cefepime, gentamicin, imipenem, levofloxacin, meropenem, trimethoprim/sulfamethoxazole, tobramycin and tetracycline, and intermediately resistant to ampicillin/sulbactam. NR-52239 lot 70039374 was produced by inoculation of the deposited material into Tryptic Soy broth and grown for 1 day at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar kolles, which were grown for 1 day at 37°C in an aerobic atmosphere to produce this lot. Quality control testing was completed under propagation conditions unless otherwise noted.

**Lot: 70039374**

**Manufacturing Date: 25SEP2020**

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TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis</b> Cellular morphology Colony morphology  Growth at 44°C ± 2°C <sup>1</sup> 1 day in an aerobic atmosphere on Tryptic Soy agar Motility Remel™ Motility Test Medium w/TTC Indicator for 1 day at 37°C in an aerobic atmosphere VITEK® MS (MALDI-TOF)	Gram-negative rods Report results  Growth  Report results  <i>A. baumannii</i>	Gram-negative rods Circular, convex, entire, smooth and cream (Figure 1) Growth  Non-motile  <i>A. baumannii</i> (99.9%)
<b>Antibiotic Susceptibility Profile<sup>2,3</sup></b> Amikacin Ampicillin/sulbactam Cefepime Ceftriaxone Ceftazidime Ciprofloxacin Colistin Gentamicin Imipenem Levofloxacin Meropenem Trimethoprim/sulfamethoxazole Tobramycin Tetracycline	Resistant Intermediate Resistant Resistant Resistant Resistant Resistant Sensitive Resistant Resistant Resistant Resistant Resistant Resistant Resistant Resistant	Resistant (> 256 µg/mL) Resistant (48 to 64 µg/mL) <sup>4</sup> Resistant (>256 µg/mL) Resistant (≥ 64 µg/mL) Resistant (≥ 64 µg/mL) Resistant (≥ 4 µg/mL) Sensitive (≤ 0.5 µg/mL) Resistant (24 µg/mL) Resistant (≥ 8 µg/mL) Intermediate (4 µg/mL) <sup>5</sup> Resistant (≥ 8 µg/mL) Resistant (≥ 4 µg/mL) Resistant (≥ 16 µg/mL) Resistant (> 256 µg/mL)
<b>Genotypic Analysis</b> Sequencing of 16S ribosomal RNA gene (~ 1480 base pairs)	≥ 99% sequence identity to <i>A. baumannii</i> , strain MRSN 32915 (GenBank: VFHB01000088.1)	100% sequence identity to <i>A. baumannii</i> , strain MRSN 32915 (GenBank: VFHB01000088.1)
<b>Purity</b> 7 days at 37°C in an aerobic atmosphere with and without 5% CO <sub>2</sub> on Tryptic Soy agar	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology



TEST	SPECIFICATIONS	RESULTS
Viability	Growth	Growth

<sup>1</sup>Growth at 44°C differentiates *A. baumannii* from *A. calcoaceticus* and *A. pittii*, which do not grow at 44°C.

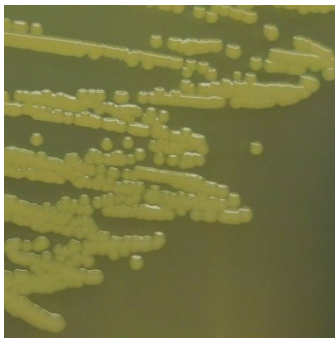
<sup>2</sup>Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S28 (2018)

<sup>3</sup>Antibiotic susceptibility was tested using a combination of VITEK<sup>®</sup>2 GN82, Sensititre GNX2F AST and E-test strips.

<sup>4</sup>*A. baumannii*, strain MRSN 32915 was deposited as intermediately resistant to ampicillin/sulbactam but showed a MIC of > 48 µg/mL (interpreted as resistant) for ampicillin/sulbactam during QC testing. Testing was performed in duplicate.

<sup>5</sup>The susceptibility result for this antibiotic is within one doubling dilution of specification, which is considered an equivalent result.

Figure 1: Colony Morphology



/Heather Couch/  
Heather Couch

Program Manager or designee, ATCC Federal Solutions

03 FEB 2022

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**Acinetobacter baumannii, Strain MRSN 337038**

**Catalog No. NR-52240**

This reagent is the tangible property of the U.S. Government.

**Product Description:**

*Acinetobacter baumannii* (*A. baumannii*), strain MRSN 337038 was isolated in 2015 from a human in Europe as part of a global surveillance program. NR-52240 was deposited as sensitive to colistin and tetracycline and resistant to amikacin, ceftazidime, ciprofloxacin, ceftriaxone, cefepime, gentamicin, imipenem, levofloxacin, meropenem, trimethoprim/sulfamethoxazole and ampicillin/sulbactam, and intermediately resistant to tobramycin. NR-52240 lot 70039376 was produced by inoculation of the deposited material into Tryptic Soy broth and grown for 1 day at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar kolles, which were grown for 1 day at 37°C in an aerobic atmosphere to produce this lot. Quality control testing was completed under propagation conditions unless otherwise noted.

**Lot: 70039376**

**Manufacturing Date: 25SEP2020**

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TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis</b> Cellular morphology Colony morphology  Growth at 44°C ± 2°C <sup>1</sup> 1 day in an aerobic atmosphere on Tryptic Soy agar Motility Remel™ Motility Test Medium w/TTC Indicator for 1 day at 37°C in an aerobic atmosphere VITEK® MS (MALDI-TOF)	Gram-negative rods Report results  Growth  Report results  <i>A. baumannii</i>	Gram-negative rods Circular, convex, entire, smooth and cream (Figure 1) Growth  Motile  <i>A. baumannii</i> (99.9%)
<b>Antibiotic Susceptibility Profile<sup>2,3</sup></b> Amikacin Ampicillin/sulbactam Cefepime Ceftriaxone Ceftazidime Ciprofloxacin Colistin Gentamicin Imipenem Levofloxacin Meropenem Trimethoprim/sulfamethoxazole Tobramycin Tetracycline	Resistant Resistant Resistant Resistant Resistant Resistant Sensitive Resistant Resistant Resistant Resistant Resistant Resistant Resistant Intermediate Sensitive	Resistant (> 256 µg/mL) Resistant (32 µg/mL) Resistant (96 µg/mL) Resistant (≥ 64 µg/mL) Resistant (≥ 64 µg/mL) Resistant (≥ 4 µg/mL) Sensitive (≤ 0.25 µg/mL) Resistant (≥ 16 µg/mL) Resistant (> 8 µg/mL) Resistant (16 µg/mL) Resistant (> 8 µg/mL) Resistant (4 µg/mL) Sensitive (≤ 2 µg/mL) <sup>4</sup> Resistant (> 128 µg/mL) <sup>5</sup>
<b>Genotypic Analysis</b> Sequencing of 16S ribosomal RNA gene (~ 1480 base pairs)	≥ 99% sequence identity to <i>A. baumannii</i> , strain MRSN 337038 (GenBank: VHEY01000100.1)	100% sequence identity to <i>A. baumannii</i> , strain MRSN 337038 (GenBank: VHEY01000100.1)

TEST	SPECIFICATIONS	RESULTS
<b>Purity</b> 7 days at 37°C in an aerobic atmosphere with and without 5% CO <sub>2</sub> on Tryptic Soy agar	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology
<b>Viability</b>	Growth	Growth

<sup>1</sup>Growth at 44°C differentiates *A. baumannii* from *A. calcoaceticus* and *A. pittii*, which do not grow at 44°C.

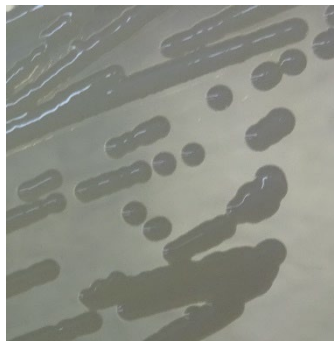
<sup>2</sup>Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S28 (2018)

<sup>3</sup>Antibiotic susceptibility was tested using a combination of VITEK<sup>®</sup>2 GN82, Sensititre GNX2F AST and E-test strips.

<sup>4</sup>*A. baumannii*, strain MRSN 337038 was deposited as intermediate to tobramycin, but showed a MIC of ≤ 2 µg/mL (interpreted as sensitive) for tobramycin during QC testing. Testing was performed in duplicate.

<sup>5</sup>*A. baumannii*, strain MRSN 337038 was deposited as sensitive to tetracycline, but showed a MIC of > 128 µg/mL (interpreted as resistant) for tetracycline during QC testing. Testing was performed in duplicate.

Figure 1: Colony Morphology



/Heather Couch/  
Heather Couch

27 MAY 2021

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**Acinetobacter baumannii, Strain MRSN 351162**

**Catalog No. NR-52241**

This reagent is the tangible property of the U.S. Government.

**Product Description:**

*Acinetobacter baumannii* (*A. baumannii*), strain MRSN 351162 was isolated 2011 from a human in Europe as part of a global surveillance program. *A. baumannii*, strain MRSN 351162 was deposited as sensitive to amikacin, ampicillin/sulbactam, cefepime, ceftazidime, ceftriaxone, ciprofloxacin, colistin, imipenem, levofloxacin, meropenem, tetracycline tobramycin and trimethoprim/sulfamethoxazole and intermediately resistant to gentamicin. NR-52241 lot 70042862 was produced by inoculation of the deposited material into Tryptic Soy broth and grown for 1 day at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar kolles, which were grown for 1 day at 37°C in an aerobic atmosphere to produce this lot. Quality control testing was completed under propagation conditions unless otherwise noted.

**Lot: 70042862**

**Manufacturing Date: 19MAR2021**

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TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis</b> Cellular morphology Colony morphology  Growth at 44°C ± 2°C <sup>1</sup> 1 day in an aerobic atmosphere on Tryptic Soy agar Motility BBL™ Motility Test Medium w/TTC Indicator for 1 day at 37°C in an aerobic atmosphere VITEK® MS (MALDI-TOF)	Gram-negative rods Report results  Growth  Report results  <i>A. baumannii</i>	Gram-negative rods Circular, convex, entire, smooth and cream (Figure 1) Growth  Non-motile  <i>A. baumannii</i> (99.9%)
<b>Antibiotic Susceptibility Profile<sup>2,3</sup></b> Amikacin Ampicillin/sulbactam Cefepime Ceftriaxone Ceftazidime Ciprofloxacin Colistin Gentamicin Imipenem Levofloxacin Meropenem Trimethoprim/sulfamethoxazole Tobramycin Tetracycline	Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Intermediate Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive	Sensitive (≤ 4 µg/mL) Sensitive (≤ 2 µg/mL) Sensitive (≤ 2 µg/mL) Intermediate (12 to 16 µg/mL) <sup>4</sup> Sensitive (4 µg/mL) Sensitive (≤ 0.25 µg/mL) Sensitive (≤ 0.25 µg/mL) Sensitive (≤ 2 µg/mL) <sup>4</sup> Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 0.5 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (2 µg/mL)
<b>Genotypic Analysis</b> Sequencing of 16S ribosomal RNA gene (~ 1480 base pairs)	≥ 99% sequence identity to <i>A. baumannii</i> , strain MRSN 351162 (GenBank: VHEX01000060.1)	100% sequence identity to <i>A. baumannii</i> , strain MRSN 351162 (GenBank: VHEX01000060.1)
<b>Purity</b> 7 days at 37°C in an aerobic atmosphere with and without 5% CO <sub>2</sub> on Tryptic Soy agar	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology

TEST	SPECIFICATIONS	RESULTS
Viability	Growth	Growth

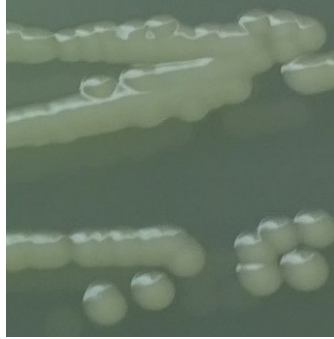
<sup>1</sup>Growth at 44°C differentiates *A. baumannii* from *A. calcoaceticus* and *A. pittii*, which do not grow at 44°C.

<sup>2</sup>Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S28 (2018)

<sup>3</sup>Antibiotic susceptibility was tested using a combination of VITEK<sup>®</sup>2 GN82, Sensititre GNX2F AST and E-test strips.

<sup>4</sup>The susceptibility result for this antibiotic is within one doubling dilution of specification, which is considered an equivalent result.

Figure 1: Colony Morphology



/Heather Couch/  
Heather Couch

04 FEB 2022

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**Acinetobacter baumannii, Strain MRSN 351524**

**Catalog No. NR-52242**

This reagent is the tangible property of the U.S. Government.

**Product Description:**

*Acinetobacter baumannii* (*A. baumannii*), strain MRSN 351524 was isolated in 2011 from a human blood sample in Europe as part of a global surveillance program. *A. baumannii*, strain MRSN 351524 was deposited as multi-locus sequence type (MLST) ST 113, sensitive to amikacin, ampicillin/sulbactam, cefepime, ceftazidime, ceftriaxone, ciprofloxacin, colistin, imipenem, levofloxacin, meropenem, tetracycline, tobramycin and trimethoprim/sulfamethoxazole and resistant to gentamicin. NR-52242 was produced by inoculation of the deposited material into Tryptic Soy broth and grown for 1 day at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar kolles, which were grown for 1 day at 37°C in an aerobic atmosphere to produce this lot. Quality control testing was completed under propagation conditions unless otherwise noted.

**Lot: 70042864**

**Manufacturing Date: 19MAR2021**

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TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis</b> Cellular morphology Colony morphology  Growth at 44°C ± 2°C <sup>1</sup> 1 day in an aerobic atmosphere on Tryptic Soy agar Motility Remel™ Motility Test Medium w/TTC Indicator for 1 day at 37°C in an aerobic atmosphere VITEK® MS (MALDI-TOF)	Gram-negative rods Report results  Growth  Report results  <i>A. baumannii</i>	Gram-negative rods Circular, convex, entire, smooth and cream (Figure 1) Growth  Non-motile  <i>A. baumannii</i> (99.9%)
<b>Antibiotic Susceptibility Profile<sup>2,3</sup></b> Amikacin Ampicillin/sulbactam Cefepime Ceftriaxone Ceftazidime Ciprofloxacin Colistin Gentamicin Imipenem Levofloxacin Meropenem Trimethoprim/sulfamethoxazole Tobramycin Tetracycline	Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Resistant Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive	Sensitive (8 to 16 µg/mL) Sensitive (≤ 2 µg/mL) Sensitive (8 µg/mL) Sensitive (8 µg/mL) Sensitive (8 µg/mL) Sensitive (1 µg/mL) Sensitive (0.5 µg/mL) Resistant (24 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 0.5 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (4 µg/mL)
<b>Genotypic Analysis</b> Sequencing of 16S ribosomal RNA gene (~ 1480 base pairs)	≥ 99% sequence identity to <i>A. baumannii</i> , strain MRSN 351524 (GenBank: VHEW01000044.1)	99.9% sequence identity to <i>A. baumannii</i> , strain MRSN 351524 (GenBank: VHEW01000044.1)
<b>Purity</b> 7 days at 37°C in an aerobic atmosphere with and without 5% CO <sub>2</sub> on Tryptic Soy agar	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology

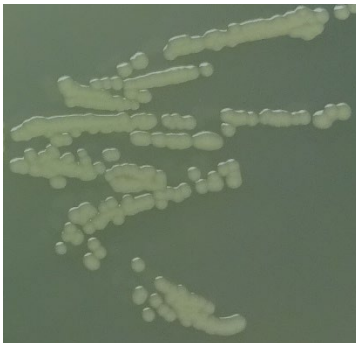
TEST	SPECIFICATIONS	RESULTS
Viability	Growth	Growth

<sup>1</sup>Growth at 44°C differentiates *A. baumannii* from *A. calcoaceticus* and *A. pittii*, which do not grow at 44°C.

<sup>2</sup>Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S28 (2018)

<sup>3</sup>Antibiotic susceptibility was tested using a combination of VITEK<sup>®</sup>2 GN82, Sensititre GNX2F AST and E-test strips.

Figure 1: Colony Morphology



/Heather Couch/  
Heather Couch

26 JAN 2022

Program Manager or designee, ATCC Federal Solutions

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**Acinetobacter baumannii, Strain MRSN 423159**

**Catalog No. NR-52243**

This reagent is the tangible property of the U.S. Government.

**Product Description:**

*Acinetobacter baumannii* (*A. baumannii*), strain MRSN 423159 was isolated in 2016 from a human respiratory sample in the United States as part of a global surveillance program. NR-52243 was deposited as multi-locus sequence type (MLST) ST 2, resistant to ampicillin/sulbactam, ceftazidime, ceftriaxone, ciprofloxacin, gentamicin, imipenem, levofloxacin, meropenem, tobramycin and trimethoprim/sulfamethoxazole, sensitive to colistin and tetracycline, and intermediately resistant to amikacin and cefepime. NR-52243 was produced by inoculation of the deposited material into Tryptic Soy broth and grown for 1 day at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar kolles, which were grown for 1 day at 37°C in an aerobic atmosphere to produce this lot. Quality control testing was completed under propagation conditions unless otherwise noted.

**Lot: 70039378**

**Manufacturing Date: 23SEP2020**

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TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis</b> Cellular morphology Colony morphology  Growth at 44°C ± 2°C <sup>1</sup> 1 day in an aerobic atmosphere on Tryptic Soy agar  Motility BBL™ Motility Test Medium w/TTC Indicator for 1 day at 35°C in an aerobic atmosphere  VITEK® MS (MALDI-TOF)	Gram-negative rods Report results  Growth  Report results  <i>A. baumannii</i>	Gram-negative rods Circular, convex, entire, smooth and cream (Figure 1) Growth  Non-motile  <i>A. baumannii</i> (99.9%)
<b>Antibiotic Susceptibility Profile<sup>2,3</sup></b> Amikacin Ampicillin/sulbactam Cefepime Ceftriaxone Ceftazidime Ciprofloxacin Colistin Gentamicin Imipenem Levofloxacin Meropenem Trimethoprim/sulfamethoxazole Tobramycin Tetracycline	Intermediate Resistant Intermediate Resistant Resistant Resistant Resistant Sensitive Resistant Resistant Resistant Resistant Resistant Resistant Resistant Sensitive	Intermediate (24 µg/mL) Intermediate (16 µg/mL) <sup>4</sup> Resistant (32 µg/mL) <sup>5</sup> Resistant (≥ 64 µg/mL) Resistant (≥ 64 µg/mL) Resistant (≥ 4 µg/mL) Sensitive (0.5 µg/mL) Resistant (≥ 16 µg/mL) Resistant (> 8 µg/mL) Resistant (> 8 µg/mL) Resistant (> 8 µg/mL) Resistant (> 4 µg/mL) Resistant (≥ 16 µg/mL) Resistant (96 µg/mL) <sup>6</sup>
<b>Genotypic Analysis</b> Sequencing of 16S ribosomal RNA gene (~ 1480 base pairs)	≥ 99% sequence identity to <i>A. baumannii</i> , strain MRSN 423159 (GenBank: VHES01000114.1)	100% sequence identity to <i>A. baumannii</i> , strain MRSN 423159 (GenBank: VHES01000114.1)
<b>Purity</b> 7 days at 37°C in an aerobic atmosphere with and without 5% CO <sub>2</sub> on Tryptic Soy agar	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology



TEST	SPECIFICATIONS	RESULTS
Viability	Growth	Growth

<sup>1</sup>Growth at 44°C differentiates *A. baumannii* from *A. calcoaceticus* and *A. pittii*, which do not grow at 44°C.

<sup>2</sup>Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S28 (2018)

<sup>3</sup>Antibiotic susceptibility was tested using a combination of VITEK<sup>®</sup>2 GN82, Sensititre GNX2F AST and E-test strips.

<sup>4</sup>*A. baumannii*, strain MRSN 423159 was deposited as being resistant to ampicillin/sulbactam. Repeated antibiotic susceptibility testing determined that for strain MRSN 423159, the ampicillin/sulbactam MIC is 16 µg per mL, which is interpreted as intermediately resistant. Testing was performed in duplicate.

<sup>5</sup>*A. baumannii*, strain MRSN 423159 was deposited as being intermediately resistant to cefepime. Repeated antibiotic susceptibility testing determined that for strain MRSN 423159, the cefepime MIC is 32 µg per mL, which is interpreted as resistant. Testing was performed in duplicate.

<sup>6</sup>*A. baumannii*, strain MRSN 423159 was deposited as being sensitive to tetracycline. Repeated antibiotic susceptibility testing determined that for strain MRSN 423159, the tetracycline MIC is 96 µg per mL, which is interpreted as resistant. Testing was performed in duplicate.

Figure 1: Colony Morphology



/Heather Couch/

Heather Couch

Program Manager or designee, ATCC Federal Solutions

11 OCT 2021

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**Acinetobacter baumannii, Strain MRSN 480561**

**Catalog No. NR-52244**

This reagent is the tangible property of the U.S. Government.

**Product Description:**

*Acinetobacter baumannii* (*A. baumannii*), strain MRSN 480561 was isolated in 2017 from a human respiratory sample in Asia as part of a global surveillance program. *A. baumannii*, strain MRSN 480561 was deposited as sensitive to colistin and tetracycline and resistant to amikacin, ampicillin/sulbactam, ceftazidime, ceftriaxone, cefepime, ciprofloxacin, gentamicin, imipenem, levofloxacin, meropenem, tobramycin and trimethoprim/sulfamethoxazole. NR-52244 lot 70039380 was produced by inoculation of the deposited material into Tryptic Soy broth and grown for 1 day at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar kolles, which were grown for 1 day at 37°C in an aerobic atmosphere to produce this lot. Quality control testing was completed under propagation conditions unless otherwise noted.

**Lot: 70039380**

**Manufacturing Date: 23SEP2021**

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TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis</b> Cellular morphology Colony morphology  Growth at 44°C ± 2°C <sup>1</sup> 1 day in an aerobic atmosphere on Tryptic Soy agar Motility Remel™ Motility Test Medium w/TTC Indicator for 1 day at 37°C in an aerobic atmosphere VITEK® MS (MALDI-TOF)	Gram-negative rods Report results  Growth  Report results  <i>A. baumannii</i>	Gram-negative rods Circular, convex, entire, smooth and cream (Figure 1) Growth  Non-motile  <i>A. baumannii</i> (99.9%)
<b>Antibiotic Susceptibility Profile<sup>2,3</sup></b> Amikacin Ampicillin/sulbactam Cefepime Ceftriaxone Ceftazidime Ciprofloxacin Colistin Gentamicin Imipenem Levofloxacin Meropenem Trimethoprim/sulfamethoxazole Tobramycin Tetracycline	Resistant Resistant Resistant Resistant Resistant Resistant Sensitive Resistant Resistant Resistant Resistant Resistant Resistant Resistant Sensitive	Resistant (> 256 µg/mL) Resistant (32 µg/mL) Resistant (> 256 µg/mL) Resistant (≥ 64 µg/mL) Resistant (≥ 64 µg/mL) Resistant (≥ 4 µg/mL) Sensitive (≤ 0.5 µg/mL) Resistant (≥ 16 µg/mL) Resistant (> 8 µg/mL) Resistant (8 µg/mL) Resistant (> 8 µg/mL) Resistant (> 4 µg/mL) Resistant (≥ 16 µg/mL) Sensitive (4 µg/mL)
<b>Genotypic Analysis</b> Sequencing of 16S ribosomal RNA gene (~ 1490 base pairs)	≥ 99% sequence identity to <i>A. baumannii</i> , strain MRSN 480561 (GenBank: VHEQ01000106.1)	99.9% sequence identity to <i>A. baumannii</i> , strain MRSN 480561 (GenBank: VHEQ01000106.1)
<b>Purity</b> 7 days at 37°C in an aerobic atmosphere with and without 5% CO <sub>2</sub> on Tryptic Soy agar	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology

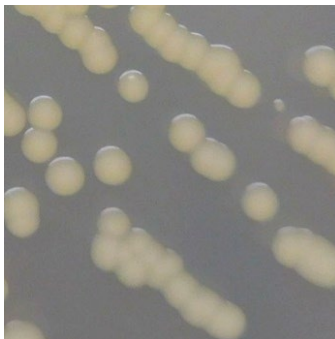
TEST	SPECIFICATIONS	RESULTS
Viability	Growth	Growth

<sup>1</sup>Growth at 44°C differentiates *A. baumannii* from *A. calcoaceticus* and *A. pittii*, which do not grow at 44°C.

<sup>2</sup>Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S28 (2018)

<sup>3</sup>Antibiotic susceptibility was tested using a combination of VITEK<sup>®</sup>2 GN82, Sensititre GNX3F AST and E-test strips.

Figure 1: Colony Morphology



/Heather Couch/

Heather Couch

Program Manager or designee, ATCC Federal Solutions

04 FEB 2022

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**Acinetobacter baumannii, Strain MRSN 480622**

**Catalog No. NR-52245**

This reagent is the tangible property of the U.S. Government.

**Product Description:**

*Acinetobacter baumannii* (*A. baumannii*), strain MRSN 480622 was isolated in 2017 from a human urine sample in Asia as part of a global surveillance program. *A. baumannii*, strain MRSN 480622 was deposited as sensitive to colistin and trimethoprim/sulfamethoxazole and resistant to amikacin, ampicillin/sulbactam, cefepime, ceftazidime, ceftriaxone, ciprofloxacin, gentamicin, imipenem, levofloxacin, meropenem, tetracycline and tobramycin. NR-52245 70039382 was produced by inoculation of the deposited material into Tryptic Soy broth and grown for 1 day at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar kolles, which were grown for 1 day at 37°C in an aerobic atmosphere to produce this lot. Quality control testing was completed under propagation conditions unless otherwise noted.

**Lot: 70039382**

**Manufacturing Date: 13NOV2020**

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TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis</b> Cellular morphology Colony morphology  Growth at 44°C ± 2°C <sup>1</sup> 1 day in an aerobic atmosphere on Tryptic Soy agar Motility Remel™ Motility Test Medium w/TTC Indicator for 1 day at 37°C in an aerobic atmosphere VITEK® MS (MALDI-TOF)	Gram-negative rods Report results  Growth  Report results  <i>A. baumannii</i>	Gram-negative rods Circular, convex, entire, smooth and cream (Figure 1) Growth  Motile  <i>A. baumannii</i> (99.9%)
<b>Antibiotic Susceptibility Profile<sup>2,3</sup></b> Amikacin Ampicillin/sulbactam Cefepime Ceftriaxone Ceftazidime Ciprofloxacin Colistin Gentamicin Imipenem Levofloxacin Meropenem Trimethoprim/sulfamethoxazole Tobramycin Tetracycline	Resistant Resistant Resistant Resistant Resistant Resistant Sensitive Resistant Resistant Resistant Resistant Resistant Resistant Sensitive Resistant Resistant	Resistant (256 µg/mL) Intermediate (24 µg/mL) <sup>4</sup> Resistant (64 µg/mL) Resistant (≥ 64 µg/mL) Resistant (≥ 64 µg/mL) Resistant (≥ 4 µg/mL) Sensitive (≤ 0.25 µg/mL) Resistant (≥ 16 µg/mL) Resistant (≥ 8 µg/mL) Resistant (12 µg/mL) Resistant (> 8 µg/mL) Sensitive (≤ 0.5 µg/mL) Resistant (≥ 16 µg/mL) Resistant (256 µg/mL)
<b>Genotypic Analysis</b> Sequencing of 16S ribosomal RNA gene (~ 1470 base pairs)	≥ 99% sequence identity to <i>A. baumannii</i> , strain MRSN 480622 (GenBank: VHEP01000072.1)	100% sequence identity to <i>A. baumannii</i> , strain MRSN 480622 (GenBank: VHEP01000072.1)
<b>Purity</b> 7 days at 37°C in an aerobic atmosphere with and without 5% CO <sub>2</sub> on Tryptic Soy agar	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology

TEST	SPECIFICATIONS	RESULTS
Viability	Growth	Growth

<sup>1</sup>Growth at 44°C differentiates *A. baumannii* from *A. calcoaceticus* and *A. pittii*, which do not grow at 44°C.

<sup>2</sup>Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S28 (2018)

<sup>3</sup>Antibiotic susceptibility was tested using a combination of VITEK<sup>®</sup>2 GN82, Sensititre GNX2F AST and E-test strips.

<sup>4</sup>The susceptibility result for this antibiotic is within one doubling dilution of specification, which is considered an equivalent result.

Figure 1: Colony Morphology



/Heather Couch/  
Heather Couch

04 FEB 2022

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**Acinetobacter baumannii, Strain MRSN 489669**

**Catalog No. NR-52246**

This reagent is the tangible property of the U.S. Government.

**Product Description:**

*Acinetobacter baumannii* (*A. baumannii*), strain MRSN 489669 was isolated in 2014 from a human respiratory sample in Europe as part of a global surveillance program. NR-52246 was deposited as multi-locus sequence type (MLST) ST 2, resistant to amikacin, ampicillin/sulbactam, cefepime, ceftazidime, ceftriaxone, ciprofloxacin, colistin, gentamicin, imipenem, levofloxacin and meropenem, intermediately resistant to tobramycin and sensitive to colistin, trimethoprim/sulfamethoxazole, and tetracycline. NR-52246 was produced by inoculation of the deposited material into Tryptic Soy broth and grown for 1 day at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar kolles, which were grown for 1 day at 37°C in an aerobic atmosphere to produce this lot. Quality control testing was completed under propagation conditions unless otherwise noted.

**Lot: 70041143**

**Manufacturing Date: 13JAN2021**

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TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis</b> Cellular morphology Colony morphology  Growth at 44°C ± 2°C <sup>1</sup> 1 day in an aerobic atmosphere on Tryptic Soy agar  Motility BBL™ Motility Test Medium w/TTC Indicator for 1 day at 35°C in an aerobic atmosphere  VITEK® MS (MALDI-TOF)	Gram-negative rods Report results  Growth  Report results  <i>A. baumannii</i>	Gram-negative rods Circular, convex, entire, smooth and cream Growth  Non-motile  <i>A. baumannii</i> (99.9%)
<b>Antibiotic Susceptibility Profile<sup>2,3</sup></b> Amikacin Ampicillin/sulbactam Cefepime Ceftriaxone Ceftazidime Ciprofloxacin Colistin Gentamicin Imipenem Levofloxacin Meropenem Trimethoprim/sulfamethoxazole Tobramycin Tetracycline	Resistant Resistant Resistant Resistant Resistant Resistant Resistant Sensitive Resistant Resistant Resistant Resistant Sensitive Intermediate Sensitive	Resistant (> 256 µg/mL) Resistant (> 32 µg/mL) Resistant (> 256 µg/mL) Resistant (≥ 64 µg/mL) Resistant (≥ 64 µg/mL) Resistant (≥ 4 µg/mL) Sensitive (≤ 0.25 µg/mL) Resistant (≥ 16 µg/mL) Resistant (> 8 µg/mL) Resistant (> 32 µg/mL) Resistant (> 8 µg/mL) Sensitive (≤ 0.5 µg/mL) Sensitive (2 to 3 µg/mL) <sup>4</sup> Sensitive (4 µg/mL)
<b>Genotypic Analysis</b> Sequencing of 16S ribosomal RNA gene (~ 1480 base pairs)	≥ 99% sequence identity to <i>A. baumannii</i> , strain MRSN 489669 (GenBank: VHEO01000071.1)	99.9% sequence identity to <i>A. baumannii</i> , strain MRSN 489669 (GenBank: VHEO01000071.1)
<b>Purity</b> 7 days at 37°C in an aerobic atmosphere with and without 5% CO <sub>2</sub> on Tryptic Soy agar	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology

TEST	SPECIFICATIONS	RESULTS
Viability	Growth	Growth

<sup>1</sup>Growth at 44°C differentiates *A. baumannii* from *A. calcoaceticus* and *A. pittii*, which do not grow at 44°C.

<sup>2</sup>Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S28 (2018)

<sup>3</sup>Antibiotic susceptibility was tested using a combination of VITEK<sup>®</sup>2 GN82, Sensititre GNX2F AST and E-test strips.

<sup>4</sup>*A. baumannii*, strain MRSN 489669 was deposited as being intermediately resistant to tobramycin. Repeated antibiotic susceptibility testing determined that for strain MRSN 489669, the tobramycin MIC is 2 to 3 µg per mL, which is interpreted as sensitive. Testing was performed in duplicate.

/Heather Couch/

Heather Couch

04 FEB 2022

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**Acinetobacter baumannii, Strain MRSN 489678**

**Catalog No. NR-52247**

This reagent is the tangible property of the U.S. Government.

**Product Description:**

*Acinetobacter baumannii* (*A. baumannii*), strain MRSN 489678 was isolated in 2014 from a human wound sample in Europe as part of a global surveillance program. *A. baumannii*, strain MRSN 489678 was deposited as multi-locus sequence type (MLST) ST 19, sensitive to amikacin, colistin, cefepime, imipenem, meropenem, ampicillin/sulbactam and tetracycline, intermediately resistant to tobramycin and resistant to ceftazidime, ceftriaxone, ciprofloxacin, gentamicin, levofloxacin and trimethoprim/sulfamethoxazole. NR-52247 was produced by inoculation of the deposited material into Tryptic Soy broth and grown for 1 day at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar kolles, which were grown for 1 day at 37°C in an aerobic atmosphere to produce this lot. Quality control testing was completed under propagation conditions unless otherwise noted.

**Lot: 70041187**

**Manufacturing Date: 13JAN2021**

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TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis</b> Cellular morphology Colony morphology  Growth at 44°C ± 2°C <sup>1</sup> 1 day in an aerobic atmosphere on Tryptic Soy agar Motility Remel™ Motility Test Medium w/TTC Indicator for 1 day at 37°C in an aerobic atmosphere VITEK® MS (MALDI-TOF)	Gram-negative rods Report results  Growth  Report results  <i>A. baumannii</i>	Gram-negative rods Circular, convex, entire, smooth and cream Growth  Non-motile  <i>A. baumannii</i> (99.9%)
<b>Antibiotic Susceptibility Profile<sup>2,3</sup></b> Amikacin Ampicillin/sulbactam Cefepime Ceftriaxone Ceftazidime Ciprofloxacin Colistin Gentamicin Imipenem Levofloxacin Meropenem Trimethoprim/sulfamethoxazole Tobramycin Tetracycline	Sensitive Sensitive Sensitive Resistant Resistant Resistant Sensitive Resistant Sensitive Resistant Sensitive Resistant Resistant Intermediate Sensitive	Sensitive (≤ 4 µg/mL) Sensitive (1.5 µg/mL) Sensitive (≤ 2 µg/mL) Resistant (> 32 µg/mL) Resistant (48 µg/mL) Resistant (≥ 2 µg/mL) Sensitive (≤ 0.25 µg/mL) Resistant (24 µg/mL) Sensitive (≤ 1 µg/mL) Resistant (8 µg/mL) Sensitive (≤ 1 µg/mL) Resistant (> 4 µg/mL) Intermediate (6 to 8 µg/mL) <b>Resistant (≥ 256 µg/mL)<sup>4</sup></b>
<b>Genotypic Analysis</b> Sequencing of 16S ribosomal RNA gene (~ 1470 base pairs)	≥ 99% sequence identity to <i>A. baumannii</i> , strain MRSN 489678 (GenBank: VHEN01000084.1)	99.9% sequence identity to <i>A. baumannii</i> , strain MRSN 489678 (GenBank: VHEN01000084.1)



TEST	SPECIFICATIONS	RESULTS
<b>Purity</b> 7 days at 37°C in an aerobic atmosphere with and without 5% CO <sub>2</sub> on Tryptic Soy agar	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology
<b>Viability</b>	Growth	Growth

<sup>1</sup>Growth at 44°C differentiates *A. baumannii* from *A. calcoaceticus* and *A. pittii*, which do not grow at 44°C.

<sup>2</sup>Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S28 (2018)

<sup>3</sup>Antibiotic susceptibility was tested using a combination of VITEK<sup>®</sup>2 GN82, Sensititre GNX2F AST and E-test strips.

<sup>4</sup>*A. baumannii*, strain MRSN 489678 was deposited as being sensitive to tetracycline. Repeated antibiotic susceptibility testing determined that for strain MRSN 489678, the tetracycline MIC is  $\geq 256 \mu\text{g per mL}$ , which is interpreted as resistant. Testing was performed in duplicate.

/Heather Couch/

Heather Couch

04 FEB 2022

Program Manager or designee, ATCC Federal Solutions

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