

Antimicrobial Resistance Panel 5: Staphylococcus aureus Quinolone Resistance Determining Region (QRDR) Mutants

Catalog No. NR-55644

Product Description:

NR-55644 consists of a 13-member panel of *Staphylococcus aureus* (*S. aureus*; ATCC® 29213™) mutant strains encoding single, characterized, quinolone resistance determining region (QRDR) substitutions in DNA gyrase and topoisomerase IV subunit genes.

The kit components were produced by inoculation of the deposited material into Tryptic Soy broth and grown for 1 day at 37°C in an aerobic atmosphere. Broth inoculums were added to Tryptic Soy agar with 5% defibrinated sheep blood kolles, which were grown for 1 day at 37°C in an aerobic atmosphere to produce the individual lots. Quality control testing was completed under propagation conditions unless otherwise noted.

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Table 1: Kit Components

COMPONENT NUMBER	STRAIN	LOT NUMBER	MANUFACTURING DATE
NR-51867	S. aureus, NB01001-DLR0080	70045670	08JUL2021
NR-51868	S. aureus, NB01001-DLR0100	70045672	08JUL2021
NR-51869	S. aureus, NB01001-DLR0118	70045674	08JUL2021
NR-51870	S. aureus, NB01001-DLR0122	70045676	08JUL2021
NR-51871	S. aureus, NB01001-DLR0127	70045678	08JUL2021
NR-51872	S. aureus, NB01001-DLR0131	70045680	08JUL2021
NR-51875	S. aureus, NB01001-DLR0024	70045682	08JUL2021
NR-51876	S. aureus, NB01001-DLR0027	70045684	08JUL2021
NR-51877	S. aureus, NB01001-DLR0056	70045686	08JUL2021
NR-51879	S. aureus, NB01001-DLR0133	70045688	08JUL2021
NR-51880	S. aureus, NB01001-DLR0028	70045690	08JUL2021
NR-51881	S. aureus, NB01001-DLR0060	70045692	08JUL2021
NR-51882	S. aureus, NB01001-DLR0064	70045694	08JUL2021

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Table 2: Staphylococcus aureus, Strain NB01001-DLR0080 (NR-51867)

TEST	SPECIFICATIONS	RESULTS
Phenotypic Analysis		
Cellular morphology	Gram-positive cocci	Gram-positive cocci
Colony morphology	Report results	Circular, convex, entire, smooth and white
Motility (wet mount)	Report results	Non-motile
Hemolysis	Report results	β-hemolytic
Catalase	Positive	Positive
VITEK® MS (MALDI-TOF)	S. aureus	S. aureus (99.9%)
Antibiotic Susceptibility Profile BD BBL™ Sensi-Disc™ Susceptibility Test Discs 1 day at 35°C in an aerobic atmosphere on Mueller Hinton agar Gatifloxacin Novobiocin Etest® antibiotic test strips 1 day at 37°C in an aerobic atmosphere on Mueller Hinton agar	Report results Report results	26 mm 28 mm
Ciprofloxacin	Report results	0.5 to 0.75 μg/mL
Levofloxacin	Report results	0.25 to 0.38 μg/mL
Genotypic Analysis		
Digital DNA-DNA hybridization (dDDH) ¹	≥ 70% for species identification	S. aureus (89.8%)
Confirmation of gyrB and grlA mutations	Mutations confirmed	Pending
Purity 7 days at 37°C in an aerobic atmosphere with and without 5% CO ₂ on Tryptic Soy agar with 5% defibrinated sheep blood	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology
Viability	Growth	Growth

Relatedness between bacterial strains has traditionally been determined using DDH. For additional information, refer to Auch, A. F., et al. "Digital DNA-DNA Hybridization for Microbial Species Delineation by Means of Genome-to-Genome Sequence Comparison." Stand. Genomic Sci. 2 (2010): 117-134. PubMed: 21304684.

Table 3: Staphylococcus aureus, Strain NB01001-DLR0100 (NR-51868)

TEST	SPECIFICATIONS	RESULTS
Phenotypic Analysis		
Cellular morphology	Gram-positive cocci	Gram-positive cocci
Colony morphology	Report results	Circular, convex, entire, smooth and white
Motility (wet mount)	Report results	Non-motile
Hemolysis	Report results	β-hemolytic
Catalase	Positive	Positive
VITEK® MS (MALDI-TOF)	S. aureus	S. aureus (99.9%)
Antibiotic Susceptibility Profile		
BD BBL™ Sensi-Disc™ Susceptibility Test		
Discs		
1 day at 35°C in an aerobic atmosphere on		
Mueller Hinton agar		
Gatifloxacin	Report results	26 mm
Novobiocin	Report results	30 mm
Etest [®] antibiotic test strips		
1 day at 35°C in an aerobic atmosphere on		
Mueller Hinton agar		
Ciprofloxacin	Report results	1 μg/mL

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TEST	SPECIFICATIONS	RESULTS
Levofloxacin	Report results	0.25 to 0.38 μg/mL
Genotypic Analysis		
Digital DNA-DNA hybridization (dDDH) ¹	≥ 70% for species identification	S. aureus (89.8%)
Confirmation of gyrB, grlA and grlB mutations	Mutations confirmed	Pending
Purity 7 days at 37°C in an aerobic atmosphere with and without 5% CO ₂ on Tryptic Soy agar with 5% defibrinated sheep blood	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology
Viability	Growth	Growth

¹Relatedness between bacterial strains has traditionally been determined using DDH. For additional information, refer to Auch, A. F., et al. "Digital DNA-DNA Hybridization for Microbial Species Delineation by Means of Genome-to-Genome Sequence Comparison." <u>Stand. Genomic Sci.</u> 2 (2010): 117-134. PubMed: 21304684.

Table 4: Staphylococcus aureus, Strain NB01001-DLR0118 (NR-51869)

Table 4: Staphylococcus aureus, Strain NE	` ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` `	DECLU TO
TEST	SPECIFICATIONS	RESULTS
Phenotypic Analysis		
Cellular morphology	Gram-positive cocci	Gram-positive cocci
Colony morphology	Report results	Circular, convex, entire, smooth and cream
Motility (wet mount)	Report results	Non-motile
Hemolysis	Report results	β-hemolytic
Catalase	Positive	Positive
VITEK® MS (MALDI-TOF)	S. aureus	S. aureus (99.9%)
Antibiotic Susceptibility Profile BD BBL™ Sensi-Disc™ Susceptibility Test Discs 1 day at 35°C in an aerobic atmosphere on Mueller Hinton agar Gatifloxacin Novobiocin Etest® antibiotic test strips 1 day at 35°C in an aerobic atmosphere on Mueller Hinton agar Ciprofloxacin Levofloxacin	Report results Report results Report results Report results	22 mm 29 mm 1 µg/mL 0.75 to 1 µg/mL
Genotypic Analysis		
Digital DNA-DNA hybridization (dDDH) ¹	≥ 70% for species identification	S. aureus (89.8%)
Confirmation of gyrA, gyrB, grlA and grlB mutations	Mutations confirmed	Pending
Purity 7 days at 37°C in an aerobic atmosphere with and without 5% CO ₂ on Tryptic Soy agar with 5% defibrinated sheep blood	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology
Viability	Growth	Growth

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Table 5: Staphylococcus aureus, Strain NB01001-DLR0122 (NR-51870)

TEST	SPECIFICATIONS	RESULTS
Phenotypic Analysis		
Cellular morphology	Gram-positive cocci	Gram-positive cocci

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TEST	SPECIFICATIONS	RESULTS
Colony morphology	Report results	Circular, convex, entire, smooth and
		cream
Motility (wet mount)	Report results	Non-motile
Hemolysis	Report results	β-hemolytic
Catalase	Positive	Positive
VITEK® MS (MALDI-TOF)	S. aureus	S. aureus (99.9%)
Antibiotic Susceptibility Profile		
BD BBL™ Sensi-Disc™ Susceptibility Test		
Discs		
1 day at 35°C in an aerobic atmosphere on		
Mueller Hinton agar		
Gatifloxacin	Report results	22 mm
Novobiocin	Report results	28 to 29 mm
Etest® antibiotic test strips		
1 day at 35°C in an aerobic atmosphere on		
Mueller Hinton agar		
Ciprofloxacin	Report results	1.5 to 2 μg/mL
Levofloxacin	Report results	0.75 to 1 μg/mL
Genotypic Analysis		
Digital DNA-DNA hybridization (dDDH) ¹	≥ 70% for species identification	S. aureus (89.8%)
Confirmation of gyrA, gyrB, grlA and grlB	Mutations confirmed	Pending
mutations		
Purity	Growth consistent with expected	Growth consistent with expected
7 days at 37°C in an aerobic atmosphere with	colony morphology	colony morphology
and without 5% CO ₂ on Tryptic Soy agar with		
5% defibrinated sheep blood		
Viability	Growth	Growth

¹Relatedness between bacterial strains has traditionally been determined using DDH. For additional information, refer to Auch, A. F., et al. "Digital DNA-DNA Hybridization for Microbial Species Delineation by Means of Genome-to-Genome Sequence Comparison." <u>Stand. Genomic Sci.</u> 2 (2010): 117-134. PubMed: 21304684.

Table 6: Staphylococcus aureus, Strain NB01001-DLR0127 (NR-51871)

TEST	SPECIFICATIONS	RESULTS
Phenotypic Analysis		
Cellular morphology	Gram-positive cocci	Gram-positive cocci
Colony morphology	Report results	Circular, convex, entire, opaque and cream
Motility (wet mount)	Report results	Non-motile
Hemolysis	Report results	β-hemolytic
Catalase	Positive	Positive
VITEK [®] MS (MALDI-TOF)	S. aureus	S. aureus (99.9%)
Antibiotic Susceptibility Profile		
BD BBL™ Sensi-Disc™ Susceptibility Test		
Discs		
1 day at 35°C in an aerobic atmosphere on		
Mueller Hinton agar		
Gatifloxacin	Report results	21 to 22 mm
Novobiocin	Report results	28 mm
Etest® antibiotic test strips	·	
1 day at 35°C in an aerobic atmosphere on		
Mueller Hinton agar		
Ciprofloxacin	Report results	1.0 μg/mL
Levofloxacin	Report results	0.5 µg/mL

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TEST	SPECIFICATIONS	RESULTS
Genotypic Analysis	> 700/ for analisa identification	C 01/2012 (90.99/.)
Digital DNA-DNA hybridization (dDDH) ¹ Confirmation of <i>gyrA</i> , <i>gyrB</i> , <i>grlA</i> and <i>grlB</i> mutations	≥ 70% for species identification Mutations confirmed	S. aureus (89.8%) Pending
Purity 7 days at 37°C in an aerobic atmosphere with and without 5% CO ₂ on Tryptic Soy agar with 5% defibrinated sheep blood	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology
Viability	Growth	Growth

¹Relatedness between bacterial strains has traditionally been determined using DDH. For additional information, refer to Auch, A. F., et al. "Digital DNA-DNA Hybridization for Microbial Species Delineation by Means of Genome-to-Genome Sequence Comparison." <u>Stand. Genomic Sci.</u> 2 (2010): 117-134. PubMed: 21304684.

Table 7: Staphylococcus aureus, Strain NB01001-DLR0131 (NR-51872)

TEST	SPECIFICATIONS	RESULTS
Phenotypic Analysis		
Cellular morphology	Gram-positive cocci	Gram-positive cocci
Colony morphology	Report results	Circular, convex, entire, opaque and cream
Motility (wet mount)	Report results	Non-motile
Hemolysis	Report results	β-hemolytic
Catalase	Positive	Positive
VITEK® MS (MALDI-TOF)	S. aureus	S. aureus (99.9%)
Antibiotic Susceptibility Profile BD BBL™ Sensi-Disc™ Susceptibility Test Discs 1 day at 35°C in an aerobic atmosphere on Mueller Hinton agar Gatifloxacin Novobiocin Etest® antibiotic test strips 1 day at 35°C in an aerobic atmosphere on Mueller Hinton agar Ciprofloxacin Levofloxacin	Report results Report results Report results Report results	22 mm 28 mm 1.0 μg/mL 0.5 μg/mL
Genotypic Analysis		
Digital DNA-DNA hybridization (dDDH) ¹ Confirmation of <i>gyrA</i> , <i>gyrB</i> , <i>grlA</i> and <i>grlB</i> mutations	≥ 70% for species identification Mutations confirmed	S. aureus (89.8%) Pending
Purity 7 days at 37°C in an aerobic atmosphere with and without 5% CO ₂ on Tryptic Soy agar with 5% defibrinated sheep blood	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology
Viability	Growth	Growth

¹Relatedness between bacterial strains has traditionally been determined using DDH. For additional information, refer to Auch, A. F., et al. "Digital DNA-DNA Hybridization for Microbial Species Delineation by Means of Genome-to-Genome Sequence Comparison." <u>Stand. Genomic Sci.</u> 2 (2010): 117-134. PubMed: 21304684.

Table 8: Staphylococcus aureus, Strain NB01001-DLR0024 (NR-51875)

TEST	SPECIFICATIONS	RESULTS
Phenotypic Analysis		
Cellular morphology	Gram-positive cocci	Gram-positive cocci
Colony morphology	Report results	Circular, convex, entire, smooth and
		cream

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TEST	SPECIFICATIONS	RESULTS
Motility (wet mount)	Report results	Non-motile
Hemolysis	Report results	β-hemolytic
Catalase	Positive	Positive
VITEK® MS (MALDI-TOF)	S. aureus	S. aureus (99.9%)
Antibiotic Susceptibility Profile		
BD BBL™ Sensi-Disc™ Susceptibility Test		
Discs		
1 day at 35°C in an aerobic atmosphere on		
Mueller Hinton agar		
Gatifloxacin	Report results	25 mm
Novobiocin	Report results	26 mm
Etest® antibiotic test strips		
1 day at 35°C in an aerobic atmosphere on		
Mueller Hinton agar		
Ciprofloxacin	Report results	0.5 to 0.75 μg/mL
Levofloxacin	Report results	0.25 to 0.38 μg/mL
Genotypic Analysis		
Digital DNA-DNA hybridization (dDDH) ¹	≥ 70% for species identification	S. aureus (89.4%)
Confirmation of gyrA mutation	Mutation confirmed	Pending
Purity	Growth consistent with expected	Growth consistent with expected
7 days at 37°C in an aerobic atmosphere with	colony morphology	colony morphology
and without 5% CO ₂ on Tryptic Soy agar with		
5% defibrinated sheep blood		
Viability	Growth	Growth

¹Relatedness between bacterial strains has traditionally been determined using DDH. For additional information, refer to Auch, A. F., et al. "Digital DNA-DNA Hybridization for Microbial Species Delineation by Means of Genome-to-Genome Sequence Comparison." <u>Stand. Genomic Sci.</u> 2 (2010): 117-134. PubMed: 21304684.

Table 9: Staphylococcus aureus, Strain NB01001-DLR0027 (NR-51876)

TEST	SPECIFICATIONS	RESULTS
Phenotypic Analysis		
Cellular morphology	Gram-positive cocci	Gram-positive cocci
Colony morphology	Report results	Circular, convex, entire, smooth and cream
Motility (wet mount)	Report results	Non-motile
Hemolysis	Report results	β-hemolytic
Catalase	Positive	Positive
VITEK® MS (MALDI-TOF)	S. aureus	S. aureus (99.9%)
Antibiotic Susceptibility Profile		
BD BBL™ Sensi-Disc™ Susceptibility Test		
Discs		
1 day at 35°C in an aerobic atmosphere on Mueller Hinton agar		
Gatifloxacin	Report results	23 mm
Novobiocin	Report results	27 mm
Etest® antibiotic test strips		
1 day at 35°C in an aerobic atmosphere on		
Mueller Hinton agar		
Ciprofloxacin	Report results	4 μg/mL
Levofloxacin	Report results	0.75 to 1 μg/mL
Genotypic Analysis		
Digital DNA-DNA hybridization (dDDH) ¹	≥ 70% for species identification	S. aureus (89.4%)
Confirmation of grlA mutation	Mutation confirmed	Pending

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TEST	SPECIFICATIONS	RESULTS
Purity 7 days at 37°C in an aerobic atmosphere with and without 5% CO ₂ on Tryptic Soy agar with 5% defibrinated sheep blood	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology
Viability	Growth	Growth

Relatedness between bacterial strains has traditionally been determined using DDH. For additional information, refer to Auch, A. F., et al. "Digital DNA-DNA Hybridization for Microbial Species Delineation by Means of Genome-to-Genome Sequence Comparison." <u>Stand. Genomic Sci.</u> 2 (2010): 117-134. PubMed: 21304684.

Table 10: Staphylococcus aureus, Strain NB01001-DLR0056 (NR-51877)

TEST	SPECIFICATIONS	RESULTS
Phenotypic Analysis		
Cellular morphology	Gram-positive cocci	Gram-positive cocci
Colony morphology	Report results	Circular, low convex, entire, smooth and white
Motility (wet mount)	Report results	Non-motile
Hemolysis	Report results	β-hemolytic
Catalase	Positive	Positive
VITEK® MS (MALDI-TOF)	S. aureus	S. aureus (99.9%)
Antibiotic Susceptibility Profile		
BD BBL™ Sensi-Disc™ Susceptibility Test		
Discs		
1 day at 35°C in an aerobic atmosphere on Mueller Hinton agar		
Gatifloxacin	Report results	13 mm
Novobiocin	Report results	27 mm
Etest® antibiotic test strips		
1 day at 35°C in an aerobic atmosphere on		
Mueller Hinton agar		
Ciprofloxacin	Report results	> 324 µg/mL
Levofloxacin	Report results	16 μg/mL
Genotypic Analysis		
Digital DNA-DNA hybridization (dDDH) ¹	≥ 70% for species identification	S. aureus (89.4%)
Confirmation of gyrA and grlA mutations	Mutations confirmed	Pending
Purity 7 days at 37°C in an aerobic atmosphere with and without 5% CO ₂ on Tryptic Soy agar with 5% defibrinated sheep blood	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology
Viability	Growth	Growth

¹Relatedness between bacterial strains has traditionally been determined using DDH. For additional information, refer to Auch, A. F., et al. "Digital DNA-DNA Hybridization for Microbial Species Delineation by Means of Genome-to-Genome Sequence Comparison." <u>Stand. Genomic Sci.</u> 2 (2010): 117-134. PubMed: 21304684.

Table 11: Staphylococcus aureus, Strain NB01001-DLR0133 (NR-51879)

Table 11: Staphylococcus durcus, Strain NBO 1001 BERO 100 (NR 01010)		
TEST	SPECIFICATIONS	RESULTS
Phenotypic Analysis		
Cellular morphology	Gram-positive cocci	Gram-positive cocci
Colony morphology	Report results	Circular, low convex, entire, smooth and white
Motility (wet mount)	Report results	Non-motile
Hemolysis	Report results	β-hemolytic
Catalase	Positive	Positive
VITEK® MS (MALDI-TOF)	S. aureus	S. aureus (99.9%)

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TEST	SPECIFICATIONS	RESULTS
Antibiotic Susceptibility Profile		
BD BBL™ Sensi-Disc™ Susceptibility Test		
Discs		
1 day at 35°C in an aerobic atmosphere on		
Mueller Hinton agar		
Gatifloxacin	Report results	25 mm
Novobiocin	Report results	27 mm
Etest® antibiotic test strips		
1 day at 35°C in an aerobic atmosphere on		
Mueller Hinton agar		
Ciprofloxacin	Report results	6 to 8 μg/mL
Levofloxacin	Report results	1.5 μg/mL
Genotypic Analysis		
Digital DNA-DNA hybridization (dDDH) ¹	≥ 70% for species identification	S. aureus (89.4%)
Confirmation of grlA mutation	Mutation confirmed	Pending
Purity	Growth consistent with expected	Growth consistent with expected
7 days at 37°C in an aerobic atmosphere with	colony morphology	colony morphology
and without 5% CO ₂ on Tryptic Soy agar with		
5% defibrinated sheep blood		
Viability	Growth	Growth

¹Relatedness between bacterial strains has traditionally been determined using DDH. For additional information, refer to Auch, A. F., et al. "Digital DNA-DNA Hybridization for Microbial Species Delineation by Means of Genome-to-Genome Sequence Comparison." <u>Stand. Genomic Sci.</u> 2 (2010): 117-134. PubMed: 21304684.

Table 12: Staphylococcus aureus, Strain NB01001-DLR0028 (NR-51880)

TEST	SPECIFICATIONS	RESULTS
Phenotypic Analysis		
Cellular morphology	Gram-positive cocci	Gram-positive cocci
Colony morphology	Report results	Circular, convex, entire, smooth and cream
Motility (wet mount)	Report results	Non-motile
Hemolysis	Report results	β-hemolytic
Catalase	Positive	Positive
VITEK® MS (MALDI-TOF)	S. aureus	S. aureus (99.9%)
Antibiotic Susceptibility Profile BD BBL™ Sensi-Disc™ Susceptibility Test Discs 1 day at 35°C in an aerobic atmosphere on Mueller Hinton agar		
Gatifloxacin	Report results	22 mm
Novobiocin	Report results	25 mm
Etest [®] antibiotic test strips 1 day at 35°C in an aerobic atmosphere on Mueller Hinton agar		
Ciprofloxacin	Report results	2 to 3 μg/mL
Levofloxacin	Report results	0.75 to 1 μg/mL
Genotypic Analysis		
Digital DNA-DNA hybridization (dDDH) ¹	≥ 70% for species identification	S. aureus (89.4%)
Confirmation of grlA mutation	Mutation confirmed	Pending
Purity 7 days at 37°C in an aerobic atmosphere with and without 5% CO ₂ on Tryptic Soy agar with 5% defibrinated sheep blood	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology
Viability	Growth	Growth

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Table 13: Staphylococcus aureus, Strain NB01001-DLR0060 (NR-51881)

TEST	SPECIFICATIONS	RESULTS
Phenotypic Analysis		
Cellular morphology	Gram-positive cocci	Gram-positive cocci
Colony morphology	Report results	Circular, convex, entire, smooth and
		cream
Motility (wet mount)	Report results	Non-motile
Hemolysis	Report results	β-hemolytic
Catalase	Positive	Positive
VITEK® MS (MALDI-TOF)	S. aureus	S. aureus (99.9%)
Antibiotic Susceptibility Profile		
BD BBL™ Sensi-Disc™ Susceptibility Test		
Discs		
1 day at 35°C in an aerobic atmosphere on		
Mueller Hinton agar		45
Gatifloxacin	Report results	15 mm
Novobiocin	Report results	25 mm
Etest® antibiotic test strips		
1 day at 35°C in an aerobic atmosphere on		
Mueller Hinton agar		
Ciprofloxacin	Report results	> 32 μg/mL
Levofloxacin	Report results	8 to 12 μg/mL
Genotypic Analysis		
Digital DNA-DNA hybridization (dDDH) ¹	≥ 70% for species identification	S. aureus (89.4%)
Confirmation of gyrA and grlA mutations	Mutations confirmed	Pending
Purity	Growth consistent with expected	Growth consistent with expected
7 days at 37°C in an aerobic atmosphere with	colony morphology	colony morphology
and without 5% CO ₂ on Tryptic Soy agar with		
5% defibrinated sheep blood		
Viability	Growth	Growth

Relatedness between bacterial strains has traditionally been determined using DDH. For additional information, refer to Auch, A. F., et al. "Digital DNA-DNA Hybridization for Microbial Species Delineation by Means of Genome-to-Genome Sequence Comparison." Stand. Genomic Sci. 2 (2010): 117-134. PubMed: 21304684.

Table 14: Staphylococcus aureus, Strain NB01001-DLR0064 (NR-51882)

TEST	SPECIFICATIONS	RESULTS
Phenotypic Analysis		
Cellular morphology	Gram-positive cocci	Gram-positive cocci
Colony morphology	Report results	Circular, convex, entire, smooth and gray
Motility (wet mount)	Report results	Non-motile
Hemolysis	Report results	β-hemolytic
Catalase	Positive	Positive
VITEK® MS (MALDI-TOF)	S. aureus	S. aureus (99.9%)
Antibiotic Susceptibility Profile		
BD BBL™ Sensi-Disc™ Susceptibility Test		
Discs		
1 day at 35°C in an aerobic atmosphere on		
Mueller Hinton agar		
Gatifloxacin	Report results	15 mm
Novobiocin	Report results	29 mm

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TEST	SPECIFICATIONS	RESULTS
Etest® antibiotic test strips		
1 day at 35°C in an aerobic atmosphere on		
Mueller Hinton agar		
Ciprofloxacin	Report results	> 32 µg/mL
Levofloxacin	Report results	> 32 μg/mL
Genotypic Analysis		
Digital DNA-DNA hybridization (dDDH) ¹	≥ 70% for species identification	S. aureus (89.4%)
Confirmation of gyrA and grlA mutations	Mutations confirmed	Pending
Purity	Growth consistent with expected	Growth consistent with expected
7 days at 37°C in an aerobic atmosphere with and without 5% CO ₂ on Tryptic Soy agar with 5% defibrinated sheep blood	colony morphology	colony morphology
Viability	Growth	Growth

¹Relatedness between bacterial strains has traditionally been determined using DDH. For additional information, refer to Auch, A. F., et al. "Digital DNA-DNA Hybridization for Microbial Species Delineation by Means of Genome-to-Genome Sequence Comparison." <u>Stand. Genomic Sci.</u> 2 (2010): 117-134. PubMed: 21304684.

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27 SEP 2023

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