Acinetobacter baumannii, Strain MRSN 7521

Catalog No. NR-52179
This reagent is the tangible property of the U.S. Government.

For research use only. Not for use in humans.

Contributor:
Multidrug-Resistant Organism Repository and Surveillance Network (MRSN), Bacterial Disease Branch, Walter Reed Army Institute of Research, Silver Spring, Maryland, USA

Manufacturer:
BEI Resources

Product Description:

Bacteria Classification: Moraxellaceae, Acinetobacter
Species: Acinetobacter baumannii
Strain: MRSN 7521
Original Source: 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.1,2
Comments: A. baumannii, strain MRSN 7521 was deposited as part of the MRSN Acinetobacter baumannii Diversity Panel available from BEI Resources as NR-52248. NR-52179 was deposited as multi-locus sequence type (MLST) ST 415, sensitive to colistin and ampicillin/sulbactam, resistant to amikacin, cefazidime, ciprofloxacin, ceftriaxone, gentamicin, imipenem, levofloxacin, meropenem, trimethoprim/sulfamethoxazole, tobramycin and tetracycline, and intermediately resistant to cepafirme.1 Strain MRSN 7521 is reported to have four aminoglycoside transferase genes [aac(3)-l, aac(6’)-lp, aph(3’)-lb and aph(6)-ld; conferring resistance to various aminoglycosides], two beta-lactamase genes (blaOXA-25 and blaOXA-42; conferring resistance to beta-lactams), two sulfonamide resistance genes (sul1 and sul2; conferring resistance to sulfonamides) and one tetracycline gene [tet(B); conferring resistance to tetracycline].1 The complete genome of A. baumannii, strain MRSN 7521 is available (GenBank: VHDZ00000000).

A. baumannii is an aerobic, Gram-negative bacillus that exhibits the ability to rapidly develop antibiotic resistance and is a major cause of hospital-acquired infection.3 The genomes of multidrug resistant strains of A. baumannii contain resistance “islands” that can contain up to 45 resistance genes. Acquisition of these antibiotic resistance genes occurs through genetic exchange of plasmids, transposons and integrons with Pseudomonas, Salmonella and Escherichia species.4,5

Material Provided:
Each vial contains approximately 0.5 mL of bacterial culture in Tryptic Soy broth supplemented with 10% glycerol.

Note: If homogeneity is required for your intended use, please purify prior to initiating work.

Packaging/Storage:
NR-52179 was packaged aseptically in cryovials. The product is provided frozen and should be stored at -60°C or colder immediately upon arrival. For long-term storage, the vapor phase of a liquid nitrogen freezer is recommended. Freeze-thaw cycles should be avoided.

Growth Conditions:

Media:
Nutrient broth or Tryptic Soy broth or equivalent
Nutrient agar or Tryptic Soy agar or Tryptic Soy agar with 5% defibrinated sheep blood or equivalent

Incubation:
Temperature: 37°C
Atmosphere: Aerobic

Propagation:
1. Keep vial frozen until ready for use, then thaw.
2. Transfer the entire thawed aliquot into a single tube of broth.
3. Use several drops of the suspension to inoculate an agar slant and/or plate.
4. Incubate the tube, slant and/or plate at 37°C for 1 day.

Citation:
Acknowledgment for publications should read “The following reagent was obtained through BEI Resources, NIAID, NIH: Acinetobacter baumannii, Strain MRSN 7521, NR-52179. This strain is part of the Acinetobacter baumannii Diversity Panel provided by the Multidrug-Resistant Organism Repository and Surveillance Network (MRSN) at the Walter Reed Army Institute of Research (WRAIR).”

Biosafety Level: 2

Disclaimers:
You are authorized to use this product for research use only. It is not intended for use in humans.

Use of this product is subject to the terms and conditions of the BEI Resources Material Transfer Agreement (MTA). The MTA is available on our Web site at www.beiresources.org.

While BEI Resources uses reasonable efforts to include accurate and up-to-date information on this product sheet, neither ATCC® nor the U.S. Government makes any warranties or representations as to its accuracy. Citations from scientific literature and patents are provided for

© 2021 American Type Culture Collection (ATCC). All rights reserved.
This product is sent with the condition that you are responsible for its safe storage, handling, use and disposal. ATCC® and the U.S. Government are not liable for any damages or injuries arising from receipt and/or use of this product. While reasonable effort is made to ensure authenticity and reliability of materials on deposit, the U.S. Government, ATCC®, their suppliers and contributors to BEI Resources are not liable for damages arising from the misidentification or misrepresentation of products.

Use Restrictions:
This material is distributed for internal research, non-commercial purposes only. This material, its product or its derivatives may not be distributed to third parties. Except as performed under a U.S. Government contract, individuals contemplating commercial use of the material, its products or its derivatives must contact the contributor to determine if a license is required. U.S. Government contractors may need a license before first commercial sale.

References:

ATCC® is a trademark of the American Type Culture Collection.