

***Acinetobacter baumannii*, Strain Naval-81**

**Catalog No. NR-17786**

**For research use only. Not for human use.**

**Contributor:**

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**Manufacturer:**

BEI Resources

**Product Description:**

Bacteria Classification: *Moraxellaceae, Acinetobacter*

Genus: *Acinetobacter baumannii*

Strain: Naval-81

Original Source: *Acinetobacter baumannii* (*A. baumannii*), strain Naval-81 was isolated on October 9, 2006, from human blood at the National Naval Medical Center in Bethesda, Maryland, USA.<sup>1</sup>

Comments: *A. baumannii*, strain Naval-81 is part of the “Genomic Sequencing of a Diversity of U.S. Military *Acinetobacter baumannii-calcoaceticus* Complex Isolates” project to sequence the genomes of clinical and environmental isolates of medically relevant *Acinetobacter* spp.<sup>2</sup> The complete genome sequence of *A. baumannii*, strain Naval-81 is available (GenBank: [AFDB00000000](https://www.ncbi.nlm.nih.gov/nuccore/AFDB00000000)).

*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.<sup>3</sup> 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.<sup>4,5</sup>

**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-17786 was packaged aseptically, in screw-capped plastic 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:

Tryptic Soy broth, Nutrient broth, Brain Heart Infusion broth or equivalent

Tryptic Soy agar, Tryptic Soy agar with 5% defibrinated sheep blood, Nutrient agar 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 for 1 day.

**Citation:**

Acknowledgment for publications should read “The following reagent was obtained through BEI Resources, NIAID, NIH: *Acinetobacter baumannii*, Strain Naval-81, NR-17786.”

**Biosafety Level: 2**

Appropriate safety procedures should always be used with this material. Laboratory safety is discussed in the following publication: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, and National Institutes of Health. Biosafety in Microbiological and Biomedical Laboratories. 5th ed. Washington, DC: U.S. Government Printing Office, 2009; see [www.cdc.gov/biosafety/publications/bmbl5/index.htm](http://www.cdc.gov/biosafety/publications/bmbl5/index.htm).

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**References:**

1. Nikolich, M. P., Personal Communication.
2. Nikolich, M. P. "*Acinetobacter baumannii* is an Emerging Nosocomial Pathogen and is an Important Emerging Pathogen in Treatment of Wounds in US Military Practice." J. Craig Venter Institute. (2009) <[http://gsc.jcvi.org/docs/Acinetobacter-WRAIR\\_20090514.pdf](http://gsc.jcvi.org/docs/Acinetobacter-WRAIR_20090514.pdf)>.
3. Howard, A, et al. "*Acinetobacter baumannii*: An Emerging Opportunistic Pathogen." *Virulence* 3 (2012): 243-250. PubMed: 22546906.
4. Fournier, P. E., et al. "Comparative Genomics of Multidrug Resistance in *Acinetobacter baumannii*." *PLoS Genet.* 2 (2006): e7. PubMed: 16415984.
5. Imperi, F., et al. "The Genomics of *Acinetobacter baumannii*: Insights into Genome Plasticity, Antimicrobial Resistance and Pathogenicity." *IUBMB Life* 63 (2011): 1068-1074. PubMed: 22034231.
6. Bouvet, P. J. M. and P. A. D. Grimont. "Taxonomy of the Genus *Acinetobacter* with the Recognition of *Acinetobacter baumannii* sp. nov., *Acinetobacter haemolyticus* sp. nov., *Acinetobacter johnsonii* sp. nov., and *Acinetobacter junii* sp. nov. and Emended Descriptions of *Acinetobacter calcoaceticus* and *Acinetobacter lwoffii*." *Int. J. Syst. Bacteriol.* 36 (1986): 228-240.

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