

***Acinetobacter baumannii* MRSN Diversity Panel**

Catalog No. NR-52248

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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:

NR-52248 consists of 100 individual isolates of the *Acinetobacter baumannii* (*A. baumannii*) Multidrug-Resistant Organism Repository and Surveillance Network (MRSN) Diversity Panel. Detailed information for each isolate, including multi-locus sequence type (MLST) and antibiotic susceptibility profile, as provided by the depositor, is available on the individual Product Information Sheet and Certificate of Analysis.^{1,2} Please refer to Table 1 for the description, catalog number and accession number of each isolate in the panel. The complete genome of each isolate has been sequenced (GenBank: [PRJNA545079](https://www.ncbi.nlm.nih.gov/nuclink/PRJNA545079)).

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 panel contains one vial of each *A. baumannii* MRSN isolate for a total of 100 vials. 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:

Each isolate was packaged aseptically in cryovials and assembled into one 100-section freezer box. 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* MRSN Diversity Panel, NR-52248, provided by the Multidrug-Resistant Organism Repository and Surveillance Network (MRSN) at the Walter Reed Army Institute of Research (WRAIR), Silver Spring, MD, USA."

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. 6th ed. Washington, DC: U.S. Government Printing Office, 2020; see www.cdc.gov/biosafety/publications/bmbli5/index.htm.

Disclaimers:

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References:

1. McGann, P., Personal Communication.
2. Galac, M. R., et al. "A Diverse Panel of Clinical *Acinetobacter baumannii* for Research and Development." Antimicrob. Agents Chemother. 64 (2020): e00840-20. PubMed: 32718956.
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.

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Table 1: *Acinetobacter baumannii* MRSN Diversity Panel Strains

Catalog Number	Isolate	Accession
NR-52148	<i>Acinetobacter baumannii</i> , MRSN 334	VFHA00000000
NR-52149	<i>Acinetobacter baumannii</i> , MRSN 843	VHDU00000000
NR-52150	<i>Acinetobacter baumannii</i> , MRSN 918	VHDT00000000
NR-52151	<i>Acinetobacter baumannii</i> , MRSN 959	VHDS00000000
NR-52152	<i>Acinetobacter baumannii</i> , MRSN 960	VHDR00000000
NR-52153	<i>Acinetobacter baumannii</i> , MRSN 1171	VHHG00000000
NR-52154	<i>Acinetobacter baumannii</i> , MRSN 1174	VHHF00000000
NR-52155	<i>Acinetobacter baumannii</i> , MRSN 1183	VHHD00000000
NR-52156	<i>Acinetobacter baumannii</i> , MRSN 1187	VHHC00000000
NR-52157	<i>Acinetobacter baumannii</i> , MRSN 1196	VHHB00000000
NR-52158	<i>Acinetobacter baumannii</i> , MRSN 1311	VHHA00000000
NR-52159	<i>Acinetobacter baumannii</i> , MRSN 1551	VHGQ00000000
NR-52160	<i>Acinetobacter baumannii</i> , MRSN 2821	VHGE00000000
NR-52161	<i>Acinetobacter baumannii</i> , MRSN 3360	VHEZ00000000
NR-52162	<i>Acinetobacter baumannii</i> , MRSN 3658	VHEV00000000
NR-52163	<i>Acinetobacter baumannii</i> , MRSN 3692	VHEU00000000
NR-52164	<i>Acinetobacter baumannii</i> , MRSN 3874	VHET00000000
NR-52165	<i>Acinetobacter baumannii</i> , MRSN 4484	VHER00000000
NR-52166	<i>Acinetobacter baumannii</i> , MRSN 4943	VHEM00000000
NR-52167	<i>Acinetobacter baumannii</i> , MRSN 5969	VHEL00000000
NR-52168	<i>Acinetobacter baumannii</i> , MRSN 6541	VHEK00000000
NR-52169	<i>Acinetobacter baumannii</i> , MRSN 7067	VHEJ00000000
NR-52170	<i>Acinetobacter baumannii</i> , MRSN 7113	VHEI00000000
NR-52171	<i>Acinetobacter baumannii</i> , MRSN 7124	VHEH00000000
NR-52172	<i>Acinetobacter baumannii</i> , MRSN 7137	VHEG00000000
NR-52173	<i>Acinetobacter baumannii</i> , MRSN 7153	VHEF00000000
NR-52174	<i>Acinetobacter baumannii</i> , MRSN 7213	VHEE00000000
NR-52175	<i>Acinetobacter baumannii</i> , MRSN 7251	VHED00000000
NR-52176	<i>Acinetobacter baumannii</i> , MRSN 7431	VHEC00000000
NR-52177	<i>Acinetobacter baumannii</i> , MRSN 7446	VHEB00000000
NR-52178	<i>Acinetobacter baumannii</i> , MRSN 7460	VHEA00000000
NR-52179	<i>Acinetobacter baumannii</i> , MRSN 7521	VHDZ00000000
NR-52180	<i>Acinetobacter baumannii</i> , MRSN 7576	VHDY00000000
NR-52181	<i>Acinetobacter baumannii</i> , MRSN 7690	VHDX00000000
NR-52182	<i>Acinetobacter baumannii</i> , MRSN 7725	VHDW00000000
NR-52183	<i>Acinetobacter baumannii</i> , MRSN 7735	VHDV00000000
NR-52184	<i>Acinetobacter baumannii</i> , MRSN 10372	VHHM00000000
NR-52185	<i>Acinetobacter baumannii</i> , MRSN 11224	VHHL00000000
NR-52186	<i>Acinetobacter baumannii</i> , MRSN 11663	VHHK00000000
NR-52187	<i>Acinetobacter baumannii</i> , MRSN 11669	VHHJ00000000
NR-52188	<i>Acinetobacter baumannii</i> , MRSN 11695	VHHI00000000
NR-52189	<i>Acinetobacter baumannii</i> , MRSN 11703	VHHH00000000
NR-52190	<i>Acinetobacter baumannii</i> , MRSN 11816	VHHE00000000
NR-52191	<i>Acinetobacter baumannii</i> , MRSN 14193	VHGZ00000000
NR-52192	<i>Acinetobacter baumannii</i> , MRSN 14237	VHGY00000000
NR-52193	<i>Acinetobacter baumannii</i> , MRSN 14427	VHGX00000000
NR-52194	<i>Acinetobacter baumannii</i> , MRSN 15049	VHGW00000000
NR-52195	<i>Acinetobacter baumannii</i> , MRSN 15070	VHGV00000000
NR-52196	<i>Acinetobacter baumannii</i> , MRSN 15075	VHGU00000000
NR-52197	<i>Acinetobacter baumannii</i> , MRSN 15088	VHGT00000000
NR-52198	<i>Acinetobacter baumannii</i> , MRSN 15093	VHGS00000000

Catalog Number	Isolate	Accession
NR-52199	<i>Acinetobacter baumannii</i> , MRSN 15129	VHGR00000000
NR-52200	<i>Acinetobacter baumannii</i> , MRSN 15574	VHGP00000000
NR-52201	<i>Acinetobacter baumannii</i> , MRSN 16880	VHGO00000000
NR-52202	<i>Acinetobacter baumannii</i> , MRSN 17493	VHGN00000000
NR-52203	<i>Acinetobacter baumannii</i> , MRSN 19482	VHGM00000000
NR-52204	<i>Acinetobacter baumannii</i> , MRSN 21660	VHGL00000000
NR-52205	<i>Acinetobacter baumannii</i> , MRSN 21681	VHGK00000000
NR-52206	<i>Acinetobacter baumannii</i> , MRSN 22112	VHGJ00000000
NR-52207	<i>Acinetobacter baumannii</i> , MRSN 23390	VHGI00000000
NR-52208	<i>Acinetobacter baumannii</i> , MRSN 24008	VHGH00000000
NR-52209	<i>Acinetobacter baumannii</i> , MRSN 24603	VHGG00000000
NR-52210	<i>Acinetobacter baumannii</i> , MRSN 25547	VHGF00000000
NR-52211	<i>Acinetobacter baumannii</i> , MRSN 29908	VHGD00000000
NR-52212	<i>Acinetobacter baumannii</i> , MRSN 29999	VHGC00000000
NR-52213	<i>Acinetobacter baumannii</i> , MRSN 30000	VHGB00000000
NR-52214	<i>Acinetobacter baumannii</i> , MRSN 30885	VHGA00000000
NR-52215	<i>Acinetobacter baumannii</i> , MRSN 30896	VHFZ00000000
NR-52216	<i>Acinetobacter baumannii</i> , MRSN 30909	VHFY00000000
NR-52217	<i>Acinetobacter baumannii</i> , MRSN 30912	VHFX00000000
NR-52218	<i>Acinetobacter baumannii</i> , MRSN 30945	VHFW00000000
NR-52219	<i>Acinetobacter baumannii</i> , MRSN 31159	VHFV00000000
NR-52220	<i>Acinetobacter baumannii</i> , MRSN 31196	VHFU00000000
NR-52221	<i>Acinetobacter baumannii</i> , MRSN 31461	VHFT00000000
NR-52222	<i>Acinetobacter baumannii</i> , MRSN 31468	VHFS00000000
NR-52223	<i>Acinetobacter baumannii</i> , MRSN 31523	VHFR00000000
NR-52224	<i>Acinetobacter baumannii</i> , MRSN 31915	VHFQ00000000
NR-52225	<i>Acinetobacter baumannii</i> , MRSN 31937	VHFP00000000
NR-52226	<i>Acinetobacter baumannii</i> , MRSN 31942	VHFO00000000
NR-52227	<i>Acinetobacter baumannii</i> , MRSN 31947	VHFN00000000
NR-52228	<i>Acinetobacter baumannii</i> , MRSN 32076	VHFM00000000
NR-52229	<i>Acinetobacter baumannii</i> , MRSN 32104	VHFL00000000
NR-52230	<i>Acinetobacter baumannii</i> , MRSN 32108	VHFK00000000
NR-52231	<i>Acinetobacter baumannii</i> , MRSN 32142	VHFJ00000000
NR-52232	<i>Acinetobacter baumannii</i> , MRSN 32304	VHFI00000000
NR-52233	<i>Acinetobacter baumannii</i> , MRSN 32797	VHFH00000000
NR-52234	<i>Acinetobacter baumannii</i> , MRSN 32842	VHFG00000000
NR-52235	<i>Acinetobacter baumannii</i> , MRSN 32865	VHFF00000000
NR-52236	<i>Acinetobacter baumannii</i> , MRSN 32866	VHFE00000000
NR-52237	<i>Acinetobacter baumannii</i> , MRSN 32875	VHFD00000000
NR-52238	<i>Acinetobacter baumannii</i> , MRSN 32892	VHFC00000000
NR-52239	<i>Acinetobacter baumannii</i> , MRSN 32915	VHFB00000000
NR-52240	<i>Acinetobacter baumannii</i> , MRSN 337038	VHEY00000000
NR-52241	<i>Acinetobacter baumannii</i> , MRSN 351162	VHEX00000000
NR-52242	<i>Acinetobacter baumannii</i> , MRSN 351524	VHEW00000000
NR-52243	<i>Acinetobacter baumannii</i> , MRSN 423159	VHES00000000
NR-52244	<i>Acinetobacter baumannii</i> , MRSN 480561	VHEQ00000000
NR-52245	<i>Acinetobacter baumannii</i> , MRSN 480622	VHEP00000000
NR-52246	<i>Acinetobacter baumannii</i> , MRSN 489669	VHEO00000000
NR-52247	<i>Acinetobacter baumannii</i> , MRSN 489678	VHEN00000000