Product Information Sheet for NR-41899

Klebsiella pneumoniae, Strain BWH 22

Catalog No. NR-41899

For research use only. Not for human use.

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Manufacturer:
BEI Resources

Product Description:
Bacteria Classification: *Enterobacteriaceae, Klebsiella*
Species: *Klebsiella pneumoniae*
Strain: BWH 22
Original Source: *Klebsiella pneumoniae* (*K. pneumoniae*), strain BWH 22 was isolated in 2012 from human urine in Boston, Massachusetts, USA.[1]
Comments: *K. pneumoniae*, strain BWH 22 was deposited as a carbapenem-resistant strain and is part of a Carbapenem-Resistant Enterobacteriaceae (CRE) Sequencing Project at the Broad Institute.[1,2] Strain BWH 22 was deposited as resistant to meropenem, positive for *bla*$_{KPC-2}$ and *bla*$_{TEM-1}$, MLST sequence type (ST) 258 and capsular polysaccharide (*cps)* clade I.[2] The complete genome of *K. pneumoniae,* strain BWH 22 has been sequenced (GenBank: JCNO00000000).

K. pneumoniae is a Gram-negative enterobacterium that is a major cause of nosocomial infections of the urinary and respiratory tracts. Due to the extensive spread of antibiotic-resistant strains, especially of extended-spectrum β-lactamase (ESBL)-producing strains, there has been renewed interest in *Klebsiella* infections.[3]

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-41899 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:
Tryptic Soy broth or Nutrient broth or equivalent
Tryptic Soy agar or Tryptic Soy agar with 5% defibrinated sheep blood or 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 at 37°C for 1 day.

Citation:
Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH: *Klebsiella pneumoniae*, Strain BWH 22, NR-41899."

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.

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References:

1. Onderdonk, A. B., Personal Communication.
2. Cerqueira, G. C., et al. "Multi-Institute Analysis of Carbapenem Resistance Reveals Remarkable Diversity, Unexplained Mechanisms, and Clonal Outbreaks." Proc. Natl. Acad. Sci. USA 114 (2017): 1135-1140. PubMed: 28096418.
3. Podschun, R. and U. Ullmann. "*Klebsiella* spp. as Nosocomial Pathogens: Epidemiology, Taxonomy, Typing Methods, and Pathogenicity Factors." Clin. Microbiol. Rev. 11 (1998): 589-603. PubMed: 9767057.

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