

***Klebsiella pneumoniae* subsp. *pneumoniae*, Strain WGLW5**

Catalog No. HM-749

For research use only. Not for use in humans.

Contributor:

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Manufacturer:

BEI Resources

Product Description:

Bacteria Classification: *Enterobacteriaceae*, *Klebsiella*

Species: *Klebsiella pneumoniae* subsp. *pneumoniae*

Strain: WGLW5

Original Source: *Klebsiella pneumoniae* (*K. pneumoniae*) subsp. *pneumoniae*, strain WGLW5 was isolated from a stool sample of a mouse with *T-bet*^{-/-} × *Rag2*^{-/-} ulcerative colitis (TRUC) in Boston, Massachusetts.^{1,2}

Comments: *K. pneumoniae* subsp. *pneumoniae*, strain WGLW5 ([HMP ID 1308](#)) is a reference genome for [The Human Microbiome Project](#) (HMP). HMP is an initiative to identify and characterize human microbial flora. The complete genome of *K. pneumoniae* subsp. *pneumoniae*, strain WGLW5 was sequenced at the [Broad Institute](#) (GenBank: [AMLO00000000](#)).

Note: HMP material is taxonomically classified by the depositor. Quality control of these materials is only performed to demonstrate that the material distributed by BEI Resources is identical to the deposited material.

K. pneumoniae subsp. *pneumoniae* is a Gram-negative enterobacterium that is a major cause of nosocomial infections of the urinary and respiratory tracts.³ The primary isolates emerging from these settings contain the plasmid-bound *bla*_{KPC} gene conferring specific resistance to the carbapenem class of antibiotics, as well as other β-lactams.^{3,4,5} Virulence is derived from the complex acidic polysaccharide capsules, which provide protection from phagocytosis, and also give the colonies their characteristic mucoid appearance.³

Material Provided:

Each vial contains approximately 0.5 mL of bacterial culture in Nutrient broth supplemented with 10% glycerol.

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

Packaging/Storage:

HM-749 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 equivalent

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 as part of the Human Microbiome Project: *Klebsiella pneumoniae* subsp. *pneumoniae*, Strain WGLW5, HM-749.”

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 \(BMBL\)](#). 6th ed. Washington, DC: U.S. Government Printing Office, 2020.

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References:

1. Garrett, W. S., et al. "Enterobacteriaceae Act in Concert with the Gut Microbiota to Induce Spontaneous and Maternally Transmitted Colitis." Cell Host Microbe 8 (2010): 292-300. PubMed: 20833380.
2. Garrett W. S. and Wardwell L. H., Personal Communication.
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.
4. Endimiani, A., et al. "Characterization of *bla*_{KPC}-Containing *Klebsiella pneumoniae* Isolates Detected in Different Institutions in the Eastern U.S.A." J. Antimicrob. Chemother. 63 (2009): 427-437. PubMed: 19155227.
5. Rasmussen, B. A. and K. Bush. "Carbapenem-Hydrolyzing β -Lactamases." Antimicrob. Agents Chemother. 41 (1997): 223-232. PubMed: 9021171.
6. [HMP ID 1308](#) (*K. pneumoniae* subsp. *pneumoniae*, strain WGLW5)

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