

## ***Klebsiella pneumoniae*, Strain UCI 42**

**Catalog No. NR-48562**

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

### **Contributor:**

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### **Manufacturer:**

BEI Resources

### **Product Description:**

Bacteria Classification: *Enterobacteriaceae*, *Klebsiella*

Species: *Klebsiella pneumoniae*

Strain: UCI 42

Original Source: *Klebsiella pneumoniae* (*K. pneumoniae*), strain UCI 42 was isolated in 2013 from the sputum of an ICU human patient in Irvine, California, USA.<sup>1</sup>

Comments: *K. pneumoniae*, strain UCI 42 is part of a [Carbapenem-Resistant Enterobacteriaceae \(CRE\) Sequencing Project](#) at the Broad Institute.<sup>1,2</sup> Strain UCI 42 was deposited as resistant to ampicillin, intermediately susceptible to nitrofurantoin and susceptible to cepheims, carbapenems, gentamicin, tigecycline, ciprofloxacin, levofloxacin, and trimethoprim/sulfamethoxazole.<sup>1</sup> The complete genome of *K. pneumoniae*, strain UCI 42 is available (GenBank: [JCLZ00000000](#)).

*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  $\beta$ -lactamase (ESBL)-producing strains, there has been renewed interest in *Klebsiella* infections.<sup>3</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-48562 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 UCI 42, NR-48562."

### **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. 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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