

***Escherichia coli*, Strain U9-41**

Catalog No. NR-17666

For research only. Not for human use.

Contributor:

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Manufacturer:

BEI Resources

Product Description:

Bacteria Classification: *Enterobacteriaceae*, *Escherichia*

Species: *Escherichia coli*

Strain: U9-41

Serotype: O2:K1:H4^{1,2}

Original Source: *Escherichia coli* (*E. coli*), strain U9-41 was isolated from human urine.¹

Comments: Strain U9-41 is the standard reference strain for the K1 antigen.³ *E. coli*, strain U9-41 was selected to undergo complete genome sequencing at the [J. Craig Venter Institute](http://www.jcraigventer.com).

E. coli is a Gram-negative rod-shaped bacterium which occurs singly or in pairs. It is a major facultative inhabitant of the large intestine.

Material Provided:

Each vial contains approximately 0.5 mL of bacterial culture in 0.5X 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-17666 was packaged aseptically, in screw-capped plastic cryovials. The product is provided frozen and should be stored at -80°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 equivalent

Tryptic Soy agar with 5% 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 24 hours.

Citation:

Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH: *Escherichia coli*, Strain U9-41, NR-17666."

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. Orskov, I., et al. "Serology, Chemistry, and Genetics of

- O and K Antigens of *Escherichia coli*." Bacteriol. Rev. 41 (1977): 667-710. PubMed: 334154.
2. Dr. C. DebRoy, personal communication
 3. Gross, R. J., et al. "Isolation of Bacteriophages Specific for the K1 Polysaccharide Antigen of *Escherichia coli*." J. Clin. Microbiol. 6 (1977): 548-550. PubMed: 338623.
 4. Kapur, V., et al. "Genome Sequencing and Analysis of Pathogenic *Escherichia coli* Strains." J. Craig Venter Institute. (2009) <http://gsc.jcvi.org/projects/gsc/e_coli/index.shtml>
 5. Beutin, L., et al. "Genetical and Functional Investigation of *fliC* Genes Encoding Flagellar Serotype H4 in Wildtype Strains of *Escherichia coli* and in a Laboratory *E. coli* K-12 Strain Expressing Flagellar Antigen Type H48." BMC Microbiol. 5 (2005): 4. PubMed: 15663798.

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