

## Escherichia coli Serotype O-2, Strain U9-41

Catalog No. NR-17666

For research use only. Not for use in humans.

### Contributor:

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### Manufacturer:

BEI Resources

### Product Description:

**Bacteria Classification:** *Enterobacteriaceae*, *Escherichia*

**Species:** *Escherichia coli*

**Strain:** U9-41

**Serotype:** O2:K1:H4<sup>1,2</sup>

**Original Source:** *Escherichia coli* (*E. coli*), Serotype O-2, strain U9-41 was isolated from human urine.<sup>1</sup>

**Comments:** Strain U9-41 is the standard reference strain for the K1 antigen.<sup>3</sup> *E. coli* Serotype O-2, strain U9-41 was selected to undergo complete genome sequencing at the [J. Craig Venter Institute](#).

*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 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 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 Nutrient 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: *Escherichia coli* Serotype O-2, 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 \(BMBL\)](#), 6th ed. Washington, DC: U.S. Government Printing Office, 2020.

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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. DebRoy, C., 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)
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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