

***Escherichia coli*, Strain EDL932**

**Catalog No. NR-7**

(Derived from ATCC® 43894™)

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

**Contributor:**

ATCC®

**Manufacturer:**

BEI Resources

**Product Description:**

Bacteria Classification: *Enterobacteriaceae*, *Escherichia*

Species: *Escherichia coli*

Strain: EDL932

Serotype: O157:H7

Original Source: *Escherichia coli* (*E. coli*), strain EDL932 was isolated from human feces from an outbreak of hemorrhagic colitis in Michigan in 1982.

Comment: *E. coli*, strain EDL932 was deposited at ATCC® in 1988 by the Enteric Bacteriology Section, Centers for Disease Control, Atlanta, Georgia.

*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.

*E. coli*, strain EDL932 and many other enterohemorrhagic *E. coli* (EHEC) strains release potent toxins, similar to those of *Shigella dysenteriae*, which can cause severe intestinal, kidney and central nervous system disease. *E. coli*, strain EDL932 carries virulence-associated genes located on both the chromosome and plasmid of the organism.

The presence of the plasmid pO157 and chromosomal virulence markers *stx1*, *stx2* and *eaeA* has been confirmed by PCR amplification of extracted DNA.

**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-7 was packaged aseptically, in screw-capped plastic 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 equivalent

Tryptic Soy 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 tubes and 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 EDL932, NR-7."

**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/bmb15/index.htm](http://www.cdc.gov/biosafety/publications/bmb15/index.htm).

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**References:**

1. Wells J. G., et al. "Laboratory Investigation of Hemorrhagic Colitis Outbreaks Associated with a Rare *Escherichia coli* Serotype." J Clin Microbiol. 18 (1983): 512-520. PubMed: 6355145.
2. Junkins, A. D., M. P. Doyle. "Demonstration of Exopolysaccharide Production by Enterohemorrhagic *Escherichia coli*." Curr. Microbiol. 25 (1992): 9-17. PubMed: 1369498.
3. Beutin, L., et al. "Close Association of Verotoxin (Shiga-Like Toxin) Production with Enterohemolysin Production in Strains of *Escherichia coli*." J. Clin. Microbiol. 27 (1989): 2559-2564. PubMed: 2681256.

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