

***Escherichia coli*, Strain H53 (Serotype O88:K-:H25)**

Catalog No. NR-17726

For research use only. Not for human use.

Contributor:

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Manufacturer:

BEI Resources

Product Description:

Bacteria Classification: *Enterobacteriaceae*, *Escherichia*

Species: *Escherichia coli*

Strain: H53 (also known as ATCC® 23986™)

Serotype: O88:K-:H25^{1,2}

Original Source: *Escherichia coli* (*E. coli*), strain H53 was isolated in 1945 from human urine.^{3,4}

Comments: Strain H53 is used as a reference strain for O88 serotyping.^{1,2} *E. coli*, strain H53 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 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-17726 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, Nutrient broth or equivalent
Tryptic Soy agar, Nutrient agar or 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 H53 (Serotype O88:K-:H25), NR-17726.”

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.

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References:

1. DebRoy, C., Personal Communication.
2. 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>
3. Orskov, I., et al. "Serology, Chemistry, and Genetics of O and K Antigens of *Escherichia coli*." *Bacteriol. Rev.* 41 (1977): 667-710. PubMed: 334154.
4. Knipschildt, H. E. *Undersøgelser over Coligruppens Serologi*. Copenhagen: Arnold Busck, Nyt. Nordisk Forlag, 1945.

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