**Escherichia coli, Strain JB1-95 (Serotype O111:H-)**

**Catalog No. NR-17628**

For research use only. Not for human use.

**Contributor:**
Chobi DebRoy, Ph.D., Director, *E. coli* Reference Center, Department of Veterinary and Biomedical Sciences, The Pennsylvania State University, University Park, Pennsylvania, USA

**Manufacturer:**
BEI Resources

**Product Description:**

**Bacteria Classification:** Enterobacteriaceae, Escherichia

**Species:** Escherichia coli

**Strain:** JB1-95

**Serotype:** O111:H-1,2

**Original Source:** *Escherichia coli* (E. coli), strain JB1-95 is a human isolate.1,2

**Comments:** *E. coli*, strain JB1-95 is a non-O157 Shiga toxin-producing *E. coli* (STEC) and its genome encodes for both Shiga-like type I toxin (Stx1) and Shiga-like type II toxin (Stx2).1,2 The complete genome of *E. coli*, strain JB1-95 was sequenced at the [J. Craig Venter Institute](http://www.jcvi.org) (GenBank: AEZV00000000).

*E. coli* is a Gram-negative, rod-shaped bacterium commonly found in the gut flora of warm-blooded animals and is the primary facultative anaerobe of the human gastrointestinal tract. While most *E. coli* strains are harmless and are an important part of a healthy intestinal tract, some serotypes are pathogenic, causing diarrhea, urinary tract infections, respiratory illness, pneumonia, or other illnesses in their host.3-5 Pathogenic *E. coli* may be transmitted through contaminated food or water, or through contact with infected persons or animals. The six pathotypes associated with diarrhea and collectively referred to as diarrheagenic *E. coli* are: Shiga toxin-producing *E. coli* (STEC) also referred to as Verocytotoxin-producing *E. coli* (VTEC) or enterohemorrhagic *E. coli* (EHEC)6, enterotoxigenic *E. coli* (ETEC)7, enteropathogenic *E. coli* (EPEC)8, enteroaggregative *E. coli* (EAEC)9, enteroinvasive *E. coli* (EIEC) and diffusely adherent *E. coli* (DAEC).10

**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-17628 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 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 24 hours.

**Citation:**

Acknowledgment for publications should read “The following reagent was obtained through BEI Resources, NIAID, NIH; *Escherichia coli*, Strain JB1-95 (Serotype O111:H-), NR-17628.”

**Biosafety Level:** 2


**Disclaimers:**

You are authorized to use this product for research use only. It is not intended for human use.

Use of this product is subject to the terms and conditions of the BEI Resources Material Transfer Agreement (MTA). The MTA is available on our Web site at [www.beiresources.org](http://www.beiresources.org).

While BEI Resources uses reasonable efforts to include accurate and up-to-date information on this product sheet, neither ATCC® nor the U.S. Government makes any warranties or representations as to its accuracy. Citations from scientific literature and patents are provided for informational purposes only. Neither ATCC® nor the U.S. Government warrants that such information has been confirmed to be accurate.

This product is sent with the condition that you are responsible for its safe storage, handling, use and disposal. ATCC® and the U.S. Government are not liable for any damages or injuries arising from receipt and/or use of this product. While reasonable effort is made to ensure authenticity and reliability of materials on deposit, the U.S. Government, ATCC®, their...
suppliers and contributors to BEI Resources are not liable for damages arising from the misidentification or misrepresentation of products.

Use Restrictions:
This material is distributed for internal research, non-commercial purposes only. This material, its product or its derivatives may not be distributed to third parties. Except as performed under a U.S. Government contract, individuals contemplating commercial use of the material, its products or its derivatives must contact the contributor to determine if a license is required. U.S. Government contractors may need a license before first commercial sale.

References:
1. DebRoy, C., Personal Communication.

ATCC® is a trademark of the American Type Culture Collection.