**Escherichia coli, Strain D9**

**Catalog No. HM-87**

For research use only. Not for use in humans.

**Contributor:**
Emma Allen-Vercoe, Assistant Professor, Department of Molecular and Cellular Biology, University of Guelph, Guelph, Ontario, Canada

**Manufacturer:**
BEI Resources

**Product Description:**

**Bacteria Classification:** Enterobacteriaceae, Escherichia

**Species:** Escherichia coli (deposited as Shigella sp., however this organism has been reclassified as Escherichia coli)

**Strain:** D9 (also referred to as strain 36_3_1A)

**Original Source:** Escherichia coli (E. coli), strain D9 was isolated in 2007 from normal biopsy tissue taken from the cecum of a 59-year-old male patient undergoing a colon cancer screen in Calgary, Alberta, Canada.\(^1\,\)\(^2\)

**Comments:** E. coli, strain D9 (HMP ID 0760) is a reference genome for The Human Microbiome Project (HMP). HMP is an initiative to identify and characterize human microbial flora. The complete genome of E. coli, strain D9 was sequenced at the Broad Institute (GenBank: AC6L00000000).

**Note:** HMP material is taxonomically classified by the depositor. Quality control of these materials is only performed to demonstrate that the material distributed by BEI Resources is identical to the deposited material.

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.\(^3\,\)\(^4\,\)\(^5\)

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);\(^8\) enterohemorrhagic 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:**

HM-87 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 equivalent

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 as part of the Human Microbiome Project: Escherichia coli, Strain D9 (Deposited as Shigella sp., Strain D9), HM-87."

**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.

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:
2. HMP ID 0760 (Escherichia coli, strain D9)

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