

***Escherichia coli*, Strain 101-1****Catalog No. NR-9298****For research only. Not for human use.****Contributor:**

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**Product Description:**

Bacteria Classification: *Enterobacteriaceae*, *Escherichia*

Species: *Escherichia coli*

Strain: 101-1

Original Source: *Escherichia coli* (*E. coli*), strain 101-1, was isolated from stool specimens after an outbreak of gastrointestinal illness in Japan.<sup>1</sup>

Comment: *E. coli*, strain 101-1 is an atypical EAEC and is not known to contain any of the previously identified virulence factors. Genome sequence information is available at [Escherichia coli 101-1 Project at TIGR](#).

Enteroaggregative *E. coli* (EAEC) are Gram-negative, rod-shaped bacteria which are increasingly recognized as a cause of diarrhea in children in developing countries. Typical EAEC strains contain the AggR virulence marker and a subset of AggR-regulated genes. Atypical EAEC strains are lacking the AggR regulon but result in disease that is similar to that induced by typical EAEC isolates.<sup>2</sup>

**Material Provided:**

Each vial contains approximately 0.5 mL of bacterial culture in 0.5X 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-9298 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 the NIH Biodefense and Emerging Infections Research Resources Repository, NIAID, NIH: *Escherichia coli*, Strain 101-1, NR-9298."

**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, 2007; see [www.cdc.gov/od/ohs/biosfty/bmbll5/bmbll5toc.htm](http://www.cdc.gov/od/ohs/biosfty/bmbll5/bmbll5toc.htm).

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### References:

1. Itoh, Y., et al. "Laboratory Investigation of Enteraggregative *Escherichia coli* O Untypeable:H10 Associated with a Massive Outbreak of Gastrointestinal Illness." J. Clin. Microbiol. 35 (1997): 2546-2550. PubMed: 9316905.
2. Kaper, J. B., J. P. Nataro and H. L. Mobley. "Pathogenic *Escherichia coli*." Nat. Rev. Microbiol. 2 (2004): 123-140. PubMed: 15040260.

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