

***Escherichia coli*, Strain 1099705**

Catalog No. NR-56599

For research use only. Not for use in humans.

Contributor and Manufacturer:
ATCC®

Product Description:

Bacteria Classification: *Enterobacteriaceae, Escherichia*

Species: *Escherichia coli*

Strain: 1099705

Original Source: *Escherichia coli* (*E. coli*), strain 1099705 was isolated in 2014 from a urine sample of a 78-year-old female in the Czech Republic.

Comments: *E. coli*, strain 1099705 was deposited as part of the Global Priority Superbugs Collection. NR-56599 was deposited as resistant to cefepime, ceftriaxone, ciprofloxacin, levofloxacin, tetracycline and trimethoprim/sulfamethoxazole.

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.^{1,2,3}

Material Provided:

Each vial contains approximately 0.3 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-56599 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:

Nutrient broth or Tryptic Soy broth or equivalent

Nutrient agar or Tryptic Soy 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 1 day.

Citation:

Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH: *Escherichia coli*, Strain 1099705, NR-56599."

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](#), 6th ed. Washington, DC: U.S. Government Printing Office, 2020.

Disclaimers:

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References:

1. Nataro, J. P. and J. B. Kaper. "Diarrheagenic *Escherichia coli*." *Clin. Microbiol. Rev.* 11 (1998): 142-201. PubMed: 9457432.
2. Kaper, J. B., J. P. Nataro and H. L. Mobley. "Pathogenic *Escherichia coli*." *Nat. Rev. Microbiol.* 2 (2004): 123-140. PubMed: 15040260.

3. Croxen, M. A., et al. "Recent Advances in Understanding Enteric Pathogenic *Escherichia coli*." Clin. Microbiol. Rev. 26 (2013): 822-880. PubMed: 24092857.

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