

***Escherichia coli*, Strain 3.2608**

Catalog No. NR-17625

For research only. Not for human use.

Contributor:

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Manufacturer:

BEI Resources

Product Description:

Bacteria Classification: *Enterobacteriaceae*, *Escherichia*

Species: *Escherichia coli*

Strain: 3.2608

Serotype: O103:H2^{1,2}

Original Source: *Escherichia coli* (*E. coli*), strain 3.2608 was isolated from a horse.^{1,2}

Comment: The complete genome of *E. coli*, strain 3.2608 was sequenced at the [J. Craig Venter Institute](#) (GenBank: [AEZS00000000](#)).

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.

E. coli, strain 3.2608 is referred to as a non-O157, Shiga toxin-producing *E. coli* (STEC) strain.^{1,2} STEC bacteria can cause diarrhea in humans and several STEC serotypes have been frequently associated with severe human disease, such as hemorrhagic colitis and hemolytic uremic syndrome. The *E. coli* 3.2608 genome encodes for Shiga-like type I toxin (Stx1) but not for Shiga-like type II toxin (Stx2).^{1,2}

The presence of chromosomal virulence markers *eaeA* and *stx1* and absence of chromosomal virulence marker *stx2* in NR-17625 have been confirmed by PCR amplification of extracted DNA.

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-17625 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 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 3.2608, NR-17625."

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. Dr. C. DebRoy, 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>

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