Escherichia coli, Strain TW07793

Catalog No. NR-17639

For research use only. Not for human use.

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Manufacturer:
BEI Resources

Product Description:

Bacteria Classification: Enterobacteriaceae, Escherichia
Species: Escherichia coli
Strain: TW07793
Serotype: O157:H39
Original Source: Escherichia coli (E. coli), strain TW07793 is a water isolate.1

Comment: E. coli, strain TW07793 is referred to as a non-
Shiga toxin-producing E. coli (STEC) O157 strain as its
genome does not encode for either Shiga toxin (Stx) type I
or Stx type II.1 The complete genome of E. coli, strain
TW07793 is available (GenBank: AFAG00000000).

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.2-4 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))3, enterotoxigenic E. coli (ETEC)5, enteropathogenic E. coli (EPEC)4, enteroaggregative E. coli (EAEC)6, enteroinvasive E. coli (EIEC) and diffusely adherent E. coli (DAEC).7

The O157 serogroup is a large and diverse group that
includes many serotypes that are commonly found in
animals, foods, and clinical samples, including the human
pathogenic O157:H7 serotype that produces both Stx type I
and Stx type II.11

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-17639 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 TW07793, NR-17639.”

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.

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

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