

Diarrheagenic *Escherichia coli* Virulence Target Ladder

Catalog No. NR-12150

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Contributor and Manufacturer:

BEI Resources

Product Description:

Diarrheagenic *Escherichia coli* (*E. coli*) are classified into several pathogenic groups based on their virulence characteristics. NR-12150 is a DNA ladder that can be used for identification of 12 *E. coli* virulence markers (sizes range from approximately 100 bp to 650 bp) and determination of the diarrheagenic pathotype.¹ The ladder includes PCR amplicons containing regions of CVD432, *eaeA*, *aggR*, *stx2*, *stx1*, *invE*, *elt*, *bfpA*, *esth*, EAF, *estp*, and *astA* virulence markers that are found on the chromosome or on the plasmids of enterohemorrhagic, enteropathogenic, enterotoxigenic, enteroinvasive and enteroaggregative *E. coli* (EHEC, EPEC, ETEC, EIEC and EAggEC, respectively). The nucleotide sequence of each PCR amplicon has been shown to be consistent with the corresponding target gene.

Material Provided:

Each vial contains approximately 30 µL of ladder in TE buffer (pH 7.0).

Packaging/Storage:

The ladder was packaged aseptically in screw-capped plastic cryovials. The product is provided frozen on dry ice and should be stored at -60°C or colder upon arrival. Freeze-thaw cycles should be minimized.

Citation:

Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH: Diarrheagenic *Escherichia coli* Virulence Target Ladder, NR-12150."

Biosafety Level: 1

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 <http://www.cdc.gov/biosafety/publications/bmbL5/BMBL.pdf>.

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References:

1. Kimata, K., et al. "Rapid Categorization of Pathogenic *Escherichia coli* by Multiplex PCR." Microbiol. Immunol. 49 (2005): 485-492. PubMed: 15965295.

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