Encode Escherichia Coli O157:H7/O157 (Duplex) ID kit

Item code: EIL-FS-EDX
Technology: PCR / Real Time PCR/ PCR
Manufacturer: ENCODE
Size: EIL-FS-EDX-10 Rxns
EIL-FS-EDX-25 Rxns
EIL-FS-EDX-50 Rxns
EIL-FS-EDX-100 Rxns

BACKGROUND:

The gram-negative bacterium *Escherichia coli* is the most numerous aerobic commensal inhabitants of the large intestine, but some stains of *E.coli* such as *enterohemorrhagic E. coli* (EHEC) O157:H7 can cause serious foodborne outbreaks that causes diarrhoea, fever and vomiting in humans. E. coli O157:H7 is recognized by its somatic (cell wall) antigen (O157) and its flagella antigen (H7). In addition, E. coli O157:H7 is known to produce Shiga-like toxins, which cause severe symptoms. E. coli O157:H7 is transmitted to humans primarily through consumption of contaminated foods, such as raw or undercooked ground meat products and raw milk. The reservoir of this pathogen appears to be mainly cattle, ruminants, mammals and birds. The urgent need for rapid, accurate, and sensitive methods for the detection of these E. coli strains is a major food safety issue. Today, there are approved methods for PCR based detection of pathogenic genes of Escherichia coli unique DNA sequences, in particular using real time PCR and specific fluorescent probes.

PRODUCT DESCRIPTION:

REAL TIME DETECTION KIT *E.coli* uses real-time PCR technology for the detection of *E.coli strains* O157:H7 / O15 in a simple, efficient, reliable, and rapid procedure. This method is based on 5’ nuclease real time PCR reactions to amplify a unique and desirable genomic sequence in the target microorganism. This carefully designed primers and probe ensure highest sensitivity, accuracy and specificity.