



NQAC

Nestlé Quality Assurance Center
Dublin

Technical Datasheet

Analysis Name: Detection of Shiga toxin-producing *E. coli* (STEC)

Method Number: ISO-TS-13136.2012

Scope of Application: Products intended for human consumption and feeding of animals; environmental samples

Description: This method is a qualitative PCR screening test for Shiga-toxin producing *Escherichia coli*. Samples are enriched in a non-selective or selective enrichment broth, depending on product type. An aliquot of the enrichment is lysed and analyzed using real-time PCR. Samples that screen positive for the Shiga-toxin genes (*stx1* and/or *stx2*) are considered positive for STEC.

Sample Weight Required: 25 g

Analytical Platform: PCR

Special Information: Samples that screen presumptive for the *stx* genes will automatically undergo confirmation analyses (ISO-TS-13136.2012-B).

The isolation of STEC strains is required to confirm that the positive PCR signals are generated from genes present in the same live bacterial cell.

An STEC Final result of Detected (Presumptive) means that the *stx* gene was detected in the initial screen, but no isolate could be successfully cultured.

Analyte Reported	Alias	Unit of Measure	Limit of Quantification	Reproducibility
STEC Final		/25 g	0.592 – 1.100 CFU/25 g or mL of sample	Not Detected Detected Detected (Presumptive)