

Technical Datasheet

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

Method Number: ISO-TS-13136.2012-B

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

Description: This confirmation method utilizes both cultural isolation and subsequent real-time PCR serogroup testing. Presumptive samples are subcultured onto selective/differential agars. Suspect colonies are re-grown onto a non-selective agar. Individual colonies are selected, lysed, and analyzed with PCR. PCR confirmation detects the presence of STEC virulence genes (*stx* and *eae*), as well as the Top 5 serogroups (O26, O103, O111, O145, and O157).

Sample Weight Required: Presumptive samples/cultural isolates

Analytical Platform: Cultural, PCR

Special information: 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.

STEC isolates that fall outside of the Top 5 serogroups (above) can be sent to a reference laboratory for further characterization.

Analyte Reported	Alias	Unit of Measure	Limit of Quantification
STEC Confirmation Final	N/A	N/A	Not Detected Detected Serogroup Name (if detected)