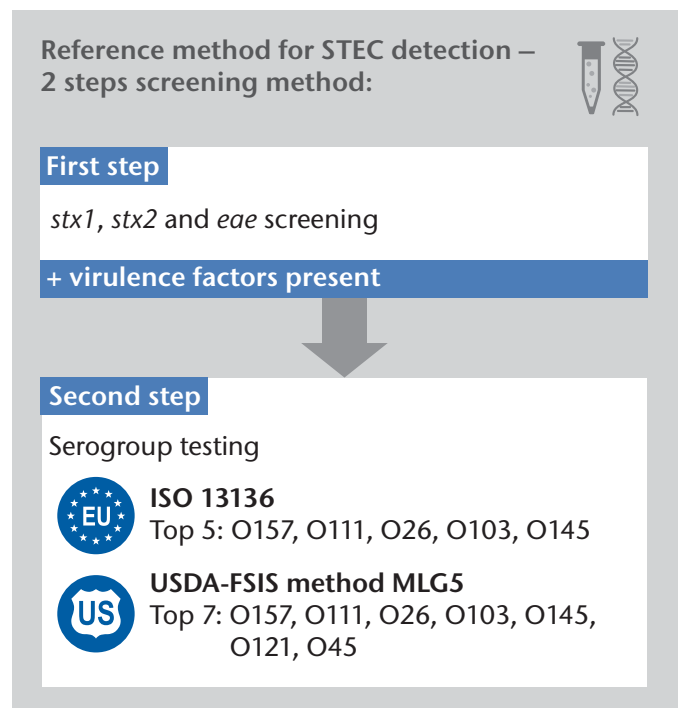




Pathogenic *Escherichia coli* detection with real-time PCR

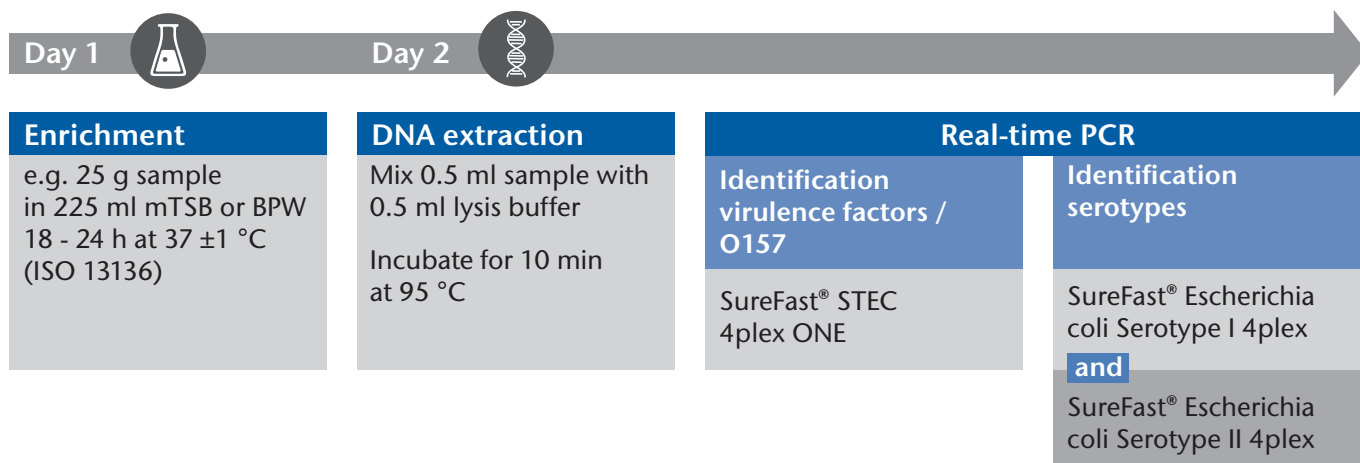
- Simple & straightforward – 10 min thermal lysis protocol
- Increased Efficiency – detect the “Big Six” in parallel and other pathogens
- Flexible – open platform

EHEC stands for enterohaemorrhagic *Escherichia coli* and belongs to the human pathogens. These bacteria are often referred to as STEC (shigatoxin-producing *E. coli*). If food is contaminated with STEC which cause human disease, patients are suffering from EHEC. Due to their antigenic structure, STEC/EHEC are divided into different serogroups. In addition to the most well-known O157 serogroup, the strains O26, O45, O103, O111, O121, and O145, also referred to as “Big Six”, have been implicated in an increasing number of foodborne diseases.



SureFast® Microbiology – Detection of pathogenic *E. coli*

New SureFast® STEC 4plex ONE – simple & straightforward



Pathogenic *E. coli* real-time PCR products

For screening and identification of pathogenic *E. coli* (STEC /EHEC) a range of SureFast® kits are available:

Product	Description	No. of tests	Art. No.
DNA preparation			
SureFast® Speed Prep	For fast & easy DNA isolation without purification	100 preparations	F1054
SureFast® Bacteria	For complex matrices with strong inhibitors	100 preparations	F1021
Kits for Screening			
SureFast® Escherichia coli PLUS	FAM: <i>Escherichia coli</i> (Hygiene monitoring)	100 reactions	F5157
SureFast® STEC Screening PLUS	FAM: <i>stx1/stx2</i>	100 reactions	F5105
Kits for Identification			
SureFast® STEC 4plex ONE	FAM: <i>E. coli stx1</i> (subtype a-d) & <i>stx2</i> (subtype a-g) Cy5: <i>eae</i> ROX: <i>E. coli</i> O157	100 reactions	F5265 New
SureFast® EHEC/EPEC	FAM: <i>E. coli stx1</i> (subtype a-d) & <i>stx2</i> (subtype a-g) Cy5: <i>eae</i> ROX: <i>ipaH</i> (<i>E. coli</i> & <i>Shigella</i> spp.)	100 reactions	F5128
SureFast® Escherichia coli Serotype I 4plex	FAM: O121 Cy5: O26 ROX: O103	100 reactions	F5167
SureFast® Escherichia coli Serotype II 4plex	FAM: O45 Cy5: O145 ROX: O111	100 reactions	F5168

* HEX: Internal Amplification Control (IAC) in all kits.

Real-time PCR instruments, equipped for detection of four fluorescence emissions at the channels FAM, VIC/HEX, ROX and Cy5.

The technical validation of instruments was performed for instance on:

Agilent Mx3005P, Bio-Rad CFX96™, Roche LightCycler® 480 II, Roche cobas® z 480 Analyzer, Applied Biosystems™ 7500, Qiagen Rotor-Gene® Q and R-Biopharm RIDA®CYCLER.

See also another ONE system member: SureFast® Salmonella ONE (100 reactions, Art. No. F5211)