



foodproof® STEC Detection Kits

Shiga toxin-producing *E. coli* (STEC), like *E. coli* O157:H7, *E. coli* O157:H- or *E. coli* O104:H4 are known to cause diseases like diarrhea, hemorrhagic colitis (HC) and the potentially fatal hemolytic uremic syndrome (HUS). STEC are most commonly transmitted through undercooked minced meat, unpasteurized or inadequately pasteurized milk, cold sandwiches, sprouts and vegetables. As most of these foods have relatively short shelf lives, the need for a rapid, accurate and sensitive detection method is a major food safety issue.

The **foodproof® STEC Screening and Identification LyoKits** are based on real-time PCR technology and comply with ISO/TS 13136. STEC screening provides individual answers for *stx1*, *stx2*, and *eae* genes in one reaction. STEC identification can detect and identify the eight most important STEC serogroups O26, O45, O103, O104, O111, O121, O145 and O157 in just one single PCR test. The completely new and unique assay design enables melting curve analysis with sequence specific 5' nuclease probes, whereby the highest specificity is achieved.

Convenient cost and time-saving colony confirmation protocols help to identify bacterial colonies, providing rapid results for safe product release.

Fast: < 24 h to results with < 40 min of hands-on time. Validated 8 h enrichment time protocol for meat.

Safe: Prevention of false-positive results and carry-over contamination by using Uracil-N-Glycosylase.

Easy: Convenient, complete solution, all controls included. Rapid protocol for colony confirmation available.

Validated: In accordance with ISO/TS 13136 and USDA-FSIS MLG method. Also detects the *stx2f* variant (not part of ISO method).

Best Specificity

100% Inclusivity

All *stx1*, *stx2* and *eae* variants and STEC serogroups have been tested successfully.

100% Exclusivity

>120 strains tested, including closely related organisms and microorganisms of the same habitat.

Matrices

> 100 tested food matrices, including meat, seafood, milk, fruits, vegetables and environmental samples.

Approvals



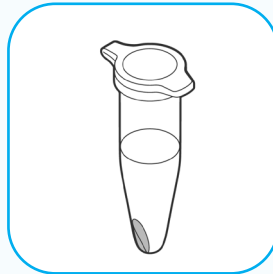
KIT230077, KIT230078, and
KIT230079, KIT230080

Workflow



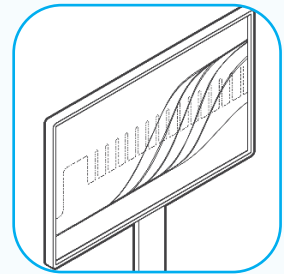
Enrichment

Standard: 18 - 24 h
Meat: 8 h



DNA Extraction

Duration depending on protocol
and number of samples



Real-time PCR

100 - 120 min

DNA Extraction Kits

Manual

foodproof® StarPrep® Three Kit
KIT230187

foodproof® StarPrep® Three 8-Strip Kit (high-throughput)
KIT230188

Automated

foodproof® Magnetic Preparation Kit I
KIT230180

Tests

100

480

480

LyoKits

Fast & Convenient

Lyophilized, prefilled reaction mix reduces hands-on time and minimizes contamination risks.

Easy Storage & Safe Transportation

Ships at room temperature, store at 2 °C to 8 °C.

Real-Time PCR Kits

foodproof® STEC Screening LyoKit®
KIT230077 (LP), KIT230078 (RP)

foodproof® STEC Identification LyoKit®
KIT230079 (LP), KIT230080 (RP)

foodproof® *E. coli* O157 Detection Kit
KIT230042

Tests

96

48

96

Instrument Compatibility

Different Profile (DP):

e.g., Dualo 32® R²

Low Profile (LP):

e.g., LightCycler® 480, LightCycler® 96, AriaMx, Bio-Rad CFX96™, Applied Biosystems™ 7500 Fast, QuantStudio™

Regular Profile (RP):

e.g., Mx3005P

Other cyclers on request.

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