

## foodproof<sup>®</sup> 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<sup>®</sup> 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



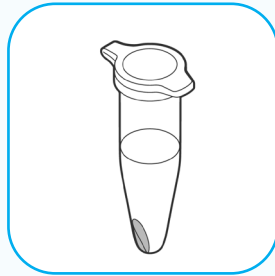
KIT230077, KIT230078, and  
KIT230079, KIT230080

## Workflow



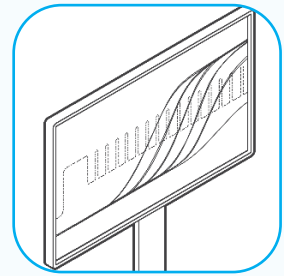
### Enrichment

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

## 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

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.

## Instrument Compatibility

### Different Profile (DP):

e.g., Dualo 32® R<sup>2</sup>

### 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.

## Tests

96

48

96

## Hygiena

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USA

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