In Regulation (EC) 2073/2005, the European Commission states that *Salmonella* and *Cronobacter* (*Enterobacter sakazakii*) are the microorganisms of greatest concern in infant formula, formula for special medical purposes and follow-on formula. The lethality rate caused by neonatal *Cronobacter* infections is between 40-80%. *Enterobacteriaceae*, which are more often present, may be used as a risk indicator.

The foodproof® *Enterobacteriaceae* plus *E. sakazakii* Detection Kit is based on the real-time PCR technology, which is well-established in the food industry. The kit enables the detection of *Enterobacteriaceae* and identification of *Cronobacter* in one single assay.

Save time and cost: negative for *Enterobacteriaceae* means negative for *Salmonella*, too!

**Fast:** 24 h to result with < 40 min of hands-on time (except probiotics)

**Safe:** Prevention of false-negative results by internal control and prevention of carry-over contamination using Uracil-N-Glycosylase

**Sensitive:** Validated to detect 1-10 cfu/10 g or 100 g sample, including enrichment

**Easy:** Convenient, complete solution including DNA extraction and real-time PCR analysis

**Experienced:** Manufacturer of PCR-based rapid tests for the food industry since 1998 with an ISO 17025 accredited service lab

**Licensed:** Fully licensed technology

**Best Specificity**

100% Inclusivity
A total of 160 Cronobacter spp. strains and 61 Enterobacteriaceae strains tested

100% Exclusivity
122 strains tested:
- 61 non-Cronobacter Enterobacteriaceae
- 61 non-Enterobacteriaceae including closely related organisms and microorganisms of the same habitat

**Matrices**
Infant formula, follow-on formula, pre-blends, probiotic food, vitamin powder, cocoa, corn starch, environmental samples

**Approvals**

**Hybridization and Hydrolysis Probes**
Workflow

Start
Enrichment

DNA Extraction
approx. 30 min

PCR Setup
approx. 10 min

Real-time PCR Run
60 - 100 min

Analysis Results in < 2.5 h

Enterobacteriaceae plus E. sakazakii Detection Kits

R 302 15  foodproof® Enterobacteriaceae plus E. sakazakii Detection Kit (5' Nuclease)
R 310 15  foodproof® Enterobacteriaceae plus E. sakazakii Detection Kit (LC 1.x, 2.0, 480)

Specific DNA Extraction Kits

S 400 07  foodproof® StarPrep One Kit, 100 isolations - bulk purification
S 400 07 L foodproof® StarPrep One Kit, 500 isolations - bulk purification
S 400 11  foodproof® Magnetic Preparation Kit I - automated purification
A 500 02  Reagent D, removes DNA from dead cells during extraction

DNA Extraction

foodproof® StarPrep One Kit enables the extraction of Enterobacteriaceae and Cronobacter spp. DNA from food matrix enrichments

Instrument Compatibility

- LightCycler 480 II, LC 96
- 5’Nuclease / TaqMan® cycler (e.g. PikoReal 24, AriaMx, CFX96, ABI 7500)

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