

A T C A T C G T A T C C A T C C C T A T C C A T C C C T
T C A T C C C T A T C G C T T C C A T C T G C T T C A
A T C T T C A T C C G T A T C T G C T T C C A T C T G C T
C C A T T T C A T C C G T A T C
G C T T C C A T C C C T A T C G C
T C A T C C A T C C C T A T C T G C T T C C A T C T G C T



BIOTECON Diagnostics

foodproof®

Norovirus Detection Kit

Hydrolysis Probes

For safer food – BIOTECON Diagnostics – simply builds up trust!

Norovirus is an ubiquitous pathogen that causes gastroenteritis worldwide. The pathogen is a RNA virus belonging to the virus family *Caliciviridae*. As a highly contagious virus, there are often major outbreaks, particularly in facilities such as child daycares, schools or hospitals. Symptoms may include diarrhea, nausea, stomach cramps and vomiting. Severe cases have been reported caused by contaminated fruits, berries, raw vegetable, raw meat and shellfish.

The **foodproof® Norovirus Detection Kit (GI, GII, GIV)** is designed for an one-step real-time reverse transcriptase PCR for the simultaneous, qualitative detection, and differentiation of norovirus of the genogroup I, II and IV. Based on primers and probes of the ISO/TS 15216, and the §64 German Food and Feed Code (LFGB), the kit contains an additional phage process control.

Fast: < 3 h to result, easy-to-use mastermix.

Safe: 3 controls included - positive, negative and process control.

ISO/TS 15216 - compliance: The Process Control (solution of MS2 phage) has to be added to the start of the sample processing.

Easy: Add 10 µl RNA sample in one step to the mastermix.

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

Licensed: Fully licensed technology.

Specificity

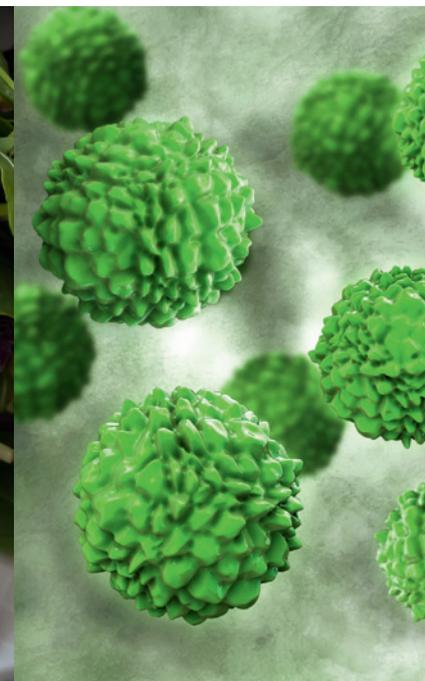
100% specificity, 11 different virus species have been tested, comprising several virus families with RNA and DNA genomes.

Sensitivity

Limit of detection (LOD) was set at 10 virus copies per reaction for GI- and GII-RNA.

Matrices

Multiple food matrices tested, including berries, fruits, shellfish (incl. Pacific oysters, mussels), minced meat. In addition, stool samples tested positive.



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 T C A T C C C T A T C G C T T C C A T C T G C T T C A
 A T C T T C A T C C G T A T C T G C T T C C A T C T G C T
 C C A T T T C A T C C G T A T C
 G C T T C C A T C C C T A T C G C
 T C A T C C A T C C C T A T C T G C T T C C A T C T G C T



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Workflow



Start
Virus concentration



RNA Extraction
approx. 45 min



PCR Setup
approx. 10 min



Real-time PCR Run
140 min

Analysis Results in 3 h

Norovirus real-time PCR Kit

R 302 38 **foodproof®** Norovirus Detection Kit (GI, GII, GIV)

Additional real-time PCR kits (of interest for seafood and berries)

RDK 100 24 **foodproof®** *Vibrio* Detection LyoKit

R 602 27 **foodproof®** *Salmonella* Detection LyoKit

RNA Extraction

foodproof® Virus Sample Preparation Kit

- Optimized for and validated with the Norovirus Detection Kit

Instrument Compatibility

- 5'Nuclease / TaqMan® cyclers (e.g. PikoReal 24, AriaMx, LightCycler 480, LC 96, ABI 7500)



Storage at -15 °C to -25 °C
64 Reactions with a final volume of 25 µl

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