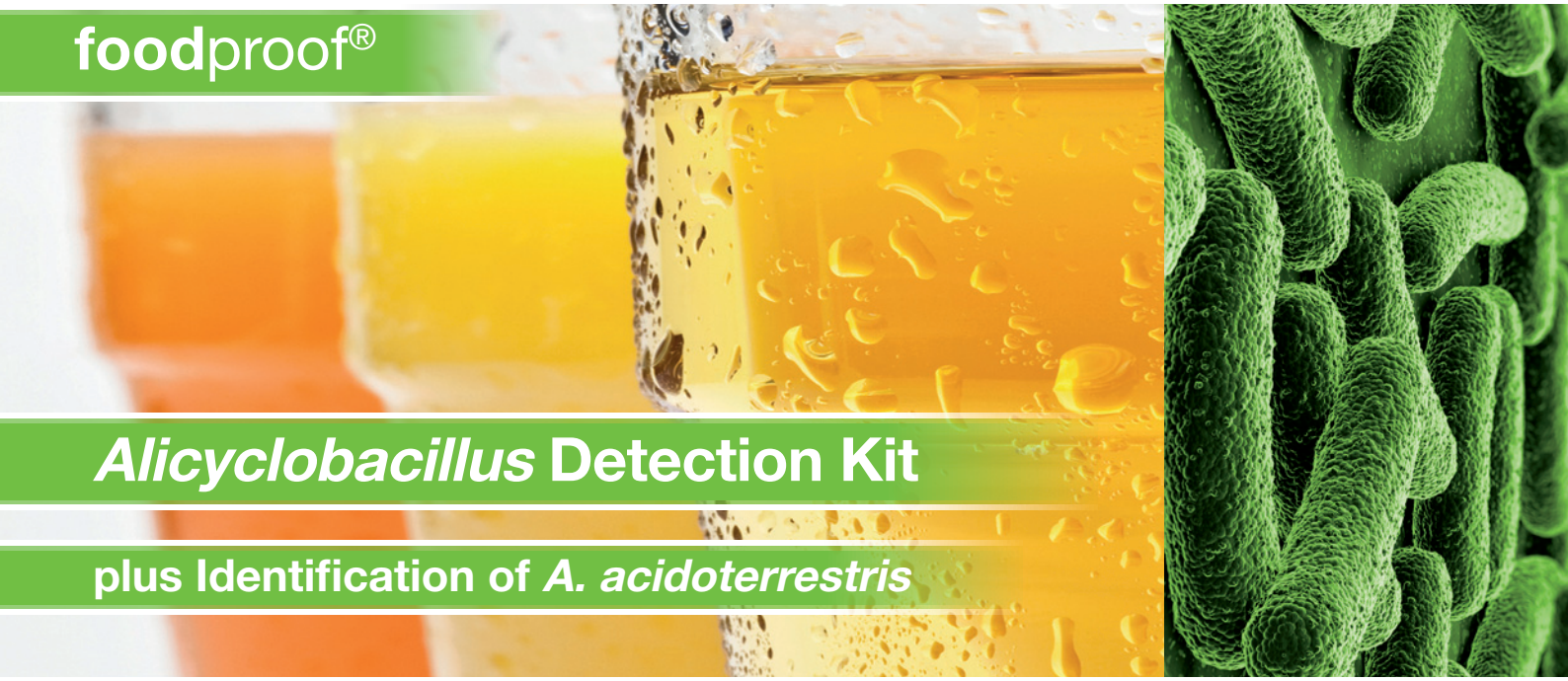
BIOTECON Diagnostics



foodproof®

Alicyclobacillus Detection Kit

plus Identification of *A. acidoterrestris*

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

The genus *Alicyclobacillus* consists of Gram-positive, acidophilic and thermophilic, spore-forming bacteria typically found in soils. *Alicyclobacillus* spores, often brought into food manufacturing facilities on contaminated fruit, are able to survive typical pasteurization procedures. The non-pathogenic bacteria can cause disinfectant-like off-flavors (guaiacol, halophenols) in the final product, especially affecting fruit juices, concentrates, and preparations as well as tomato-based products.
Alicyclobacillus acidoterrestris is the most common contaminating species of this genus.

The **food**proof® Alicyclobacillus Detection Kit is based on the real-time PCR technology, which is well-established in the food industry. The kit enables the *Alicyclobacillus* genus detection and *A. acidoterrestris* identification in one single assay.

Fast: Approx. 48 h to result with < 40 min of hands-on time

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

Sensitive: Validated to detect 10^2-10^3 cfu/ml of enrichment culture

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

- 38 *Alicyclobacillus* strains of 14 Alicyclobacillus species tested (including *A. acidoterrestris*)

100% Exclusivity

- 40 strains tested including closely related organisms and microorganisms of the same habitat

Matrices

All relevant food matrices tested, e.g. fruit-juice, fruits, tomato paste, tomato juice, fruit-based spread

Identification of Species

Alicyclobacillus acidoterrestris identification in addition to genus detection in one single assay

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Workflow

Start
Enrichment

DNA Extraction
approx. 30 min

PCR Setup
approx. 10 min

Real-time PCR Run
approx. 90 min

Analysis Results in 2.5 h

Alicyclobacillus Detection Kit

R 302 28 **food**proof® *Alicyclobacillus* Detection Kit (5‘ Nuclease)
including *A. acidoterrestris* identification

Specific DNA Extraction Kits

S 400 02 **food**proof® ShortPrep® II Kit - rapid purification
S 400 05 **food**proof® Sample Preparation Kit II - high quality column purification
S 400 08 **food**proof® StarPrep Two - bulk purification

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

DNA Extraction

foodproof® ShortPrep II Kit
foodproof® StarPrep II Kit

- enables the fast and easy extraction of Alicyclobacillus DNA from food and beverage matrices

Instrument Compatibility

- LightCycler 96, LightCycler 480 II
- 5‘Nuclease / TaqMan® cycler (e.g. PikoReal 24, CFX96, Mx3005P, ABI 7500)

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