

**foodproof®**

## ***Alicyclobacillus* Detection LyoKit**

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 standard 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, including tomato-based products. *Alicyclobacillus acidoterrestris* is the most common contaminating species of this genus.

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

**Sensitive:** High sensitivity, validated procedure according to the International Fruit and Vegetable Juice Association (IFU) method no. 12 (BAT medium).

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

**Fast:** 4 hour time-to-results with direct sample protocol, including less than 40 min hands-on time. Presence/absence testing after 2 to 3 days enrichment, saving 3 to 5 days compared to IFU Method 12 guidelines.

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

### **Best Specificity**

#### **100% Inclusivity**

38 *Alicyclobacillus* strains of 15 *Alicyclobacillus* species tested (including *A. acidoterrestris*).

#### **100% Exclusivity**

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

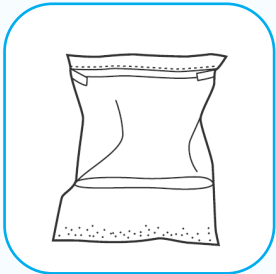
### **Matrices**

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

### **Identification of Species**

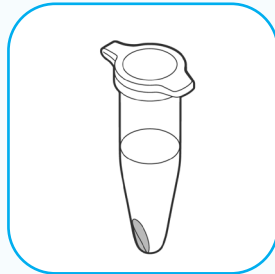
*Alicyclobacillus acidoterrestris* identification in addition to genus detection in one single assay. Easy and convenient direct sample protocol for juices and concentrates or presence/absence testing after enrichment.

## Workflow



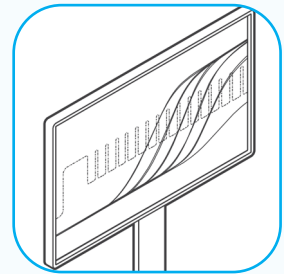
### Direct Sample or Enrichment

2 to 3 days in BAT  
or 402 medium



### DNA Extraction

approx. 30 min



### Real-Time PCR

approx. 90 min

## DNA Extraction Kits

**foodproof StarPrep Two Kit**  
KIT 2301 77

### Tests

96

### DNA Extraction

**foodproof StarPrep Two Kit**  
Enables the fast and easy extraction of *Alicyclobacillus* DNA from food and beverage matrices.

## Real-Time PCR Kits

**foodproof Alicyclobacillus Detection LyoKit**  
(including *A. acidoterrestris* identification)  
KIT 2301 51 (LP), KIT 2301 52 (RP), KIT 2301 53 (DP)

### Tests

96

### 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



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