

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

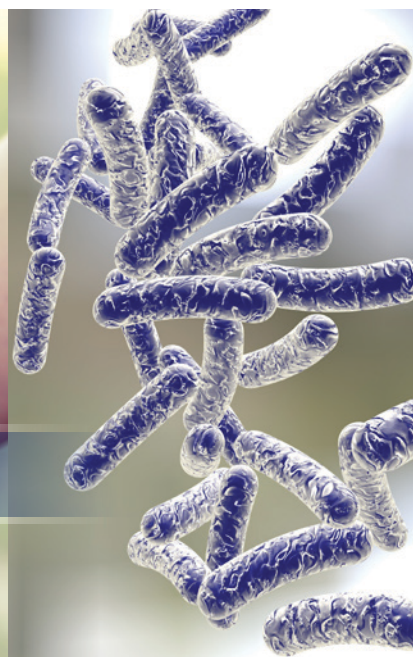


**BIOTECON** Diagnostics

**microproof®**

## Legionella Quantification LyoKit

Hydrolysis Probes



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

Legionellosis is caused by *Legionella pneumophila* and related *Legionella* bacteria. The severity of legionellosis varies from mild febrile illness (Pontiac fever) to a potentially fatal form of pneumonia (Legionnaires' disease). Most *Legionella* infections are caused by *L. pneumophila* serogroup 1, followed by other serogroups and non-pneumophila species. These include *L. longbeachae*, *L. micdadei* (*Tatlockia micdadei*), and *L. bozemanii* (*Fluoribacter bozemanii*). Water is the major reservoir for *Legionella*, which can also be found in artificial aquatic environments, such as cooling towers, water installations of hotels, ships and factories, or swimming pools. Testing for the presence of *Legionella* spp. is therefore implemented in many national standards worldwide.

Real-time PCR is a faster, easier and more precise alternative to cultural methods. The **microproof® Legionella Quantification LyoKit** detects *Legionella* spp., *L. pneumophila* and *L. pneumophila* serogroup 1 in one single test, and quantifies each of them individually.

**Safe:** Prevention of carry-over contamination by using Uracil-N-Glycosylase

**Precise:** Live/dead differentiation with Reagent D. Detection of VBNC cells. Results are displayed in genomic units / ml. Complies with ISO 12869:2012

**Comprehensive:** Packages of sample preparation & detection kits, real-time PCR instruments & diagnostic software

**Fast:** Time saving in comparison to classical microbiology: 4 h instead of 10 - 14 days

**Easy:** Convenient, complete solution, including DNA extraction, live/dead differentiation and quantitative real-time PCR analysis

**Experienced:** Manufacturer of fully licensed PCR-based rapid tests since 1998 with an ISO 17025 accredited service lab

#### Best Specificity

##### 100% Inclusivity

- 43 species/119 strains successfully tested
- Full inclusivity for genus *Legionella*

##### 100% Exclusivity

- 42 species tested
- Microorganisms of the same environmental habitat

#### Sensitivity

- Limit of Quantification: 10 genomic units
- Limit of Detection: 3 genomic units

#### Matrices

Suitable for all relevant sample types, like clear or turbid water

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  
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 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

## Workflow



**Sample Filtration**  
10 min



**DNA Extraction\***  
40 min



**PCR Setup**  
10 min



**Real-time PCR Run**  
170 min

Analysis Results in 4 h

\* including live and dead differentiation

### DNA Extraction Kit

- S 400 08 foodproof® StarPrep Two Kit
- A 500 02 Reagent D (for live/dead differentiation)
- A 500 18 Rinse Buffer (for filtered samples)

### Legionella Quantification LyoKit

- R 602 45 microproof® Legionella Quantification LyoKit



**Storage** at 2 °C to 8 °C  
**96 Reactions** with a final volume of 25 µl

### Detection & Quantification

- *Legionella* spp.,  
*L. pneumophila* and  
*L. pneumophila* serogroup 1  
in one single test
- Quantification of all 3  
parameters individually

### Instrument Compatibility

- 5'Nuclease / TaqMan®  
cycler, e.g. LightCycler  
480, LC 96 AriaMx,  
Mx3005P, ABI 7500 Fast,  
PikoReal 24, CFX96

### BIOTECON Diagnostics GmbH

Hermannswerder 17  
14473 Potsdam  
Germany

Phone: +49 (0)331-2300-200  
Fax: +49 (0)331-2300-299

bcd@bc-diagnostics.com  
www.bc-diagnostics.com