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
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

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