

## Specification

PCR kit designed for the detection and quantification of Legionella spp in water samples according to ISO/TS 12869.

## Presentation

Kit for 100 reactions  
Microtubes  
with:  $\pm 2$  ml

### Packaging Details

5 microtubes per box.

### Shelf Life

8 months

### Storage

-20-15 °C

## Composition

Reagents	Identification	Content
5x Reagent Mix*	Green	1 x 440 $\mu$ l
Primers-Probes qPCR <sup>†</sup>	Blue	1 x 100 reactions
Standard DNA ( <i>L. pneumophila</i> ATCC 33152)	Yellow	1 x (1x10exp7 UG)
Water PCR grade	White	2 x 1.5 ml

\* Reagent mix: **Solis Fast Probe<sup>®</sup> qPCR Mix with UNG (no Rox)** (contains HOT FIREPol<sup>®</sup> DNA Polymerase, UNG, qPCR buffer, dNTP mix - dATP, dCTP, dGTP, dUTP)

<sup>†</sup> Contains specific primers and probes (Legionella spp & Internal control) and DNA of Internal control.

Solis Fast Probe and Hot Firepol<sup>®</sup> are Solis Biodyne trademark, these reagents are manufactured under license.

## Description /Technique

### Description:

Regarding the use of this kit as a detection and quantification system for Legionella spp in water samples, it complies with the technical specifications of document ISO / TS 12869.

The operation of the kit has been verified according to the specifications of ISO / TS 12869 and the results are available to the user upon request from their distributor. The reliability of the results and the adequacy of the intended purpose are conditioned by a good recovery during the concentration and elution phase. This phase is not within the scope of this kit and depends solely on the good practices of each laboratory. We recommend following the provisions of the current ISO 11731 Legionella Count standard.

The primer and probe set are compatible with a viability PCR procedure.

### Technique:

Follow the kit's instructions.

Each laboratory must evaluate the results according to specifications.

Proceed according to directives and regulations.

## Quality control

### Control PCR

Initial activation: 3 min at 95°C

Denaturation: 5 s a 95°C

Annealing/Extension: 40 s a 60°C. Fluorescence detection

Total qPCR cycles: 45

### Test

PCR Efficiency. Dilutions 10exp0-10exp3, triplicate.

Slope Calibration Curve ( $y=ax+b$ )

LD qPCR <10 UG (n=10)

Internal Control Signal (Ct)

Negative Control Signal (Ct)

### Specification

75%-125%

-4,115 < a < -2,839

LD qPCR > 90%

28-32

No signal

### Sterility control

Incubation 48 hours at 30-35 °C and 48 hours at 20-25 °C: NO GROWTH.

Check at 7 days after incubation in same conditions.

### Bibliography

ISO/TS 12869 *Water quality – Detection and quantification of *Legionella* spp. and/or *Legionella pneumophila* by concentration and genic amplification by quantitative polymerase chain reaction (qPCR).*

ISO 11731:2017 *Water quality – Enumeration of Legionella*

*Legionella* spp qPCR Instructions (ISO/TS 12869), Kit for 100 reactions