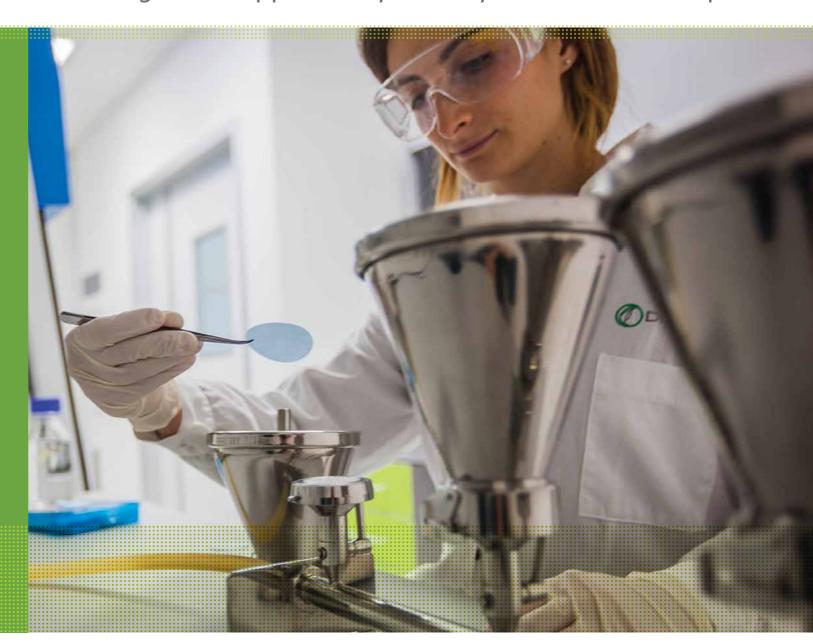


Legionella - Water testing

For the rapid detection and quantification of *Legionella* spp. and *L. pneumophila* in water samples

Legionella Water testing

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DIATHEVA Srl







DI-Check Legionella pneumophila Certificate reference No. DTV 41/01-12/19, with end of validity 04-Dec-2023 WATER ANALYSIS METHODS

The method is validated for the detection and quantification of *L. pneumophila* in all types of water samples, by comparison to the reference method NF T90-471 (2015) and ISO/TS 12869 (2019) and according to the AFNOR certification's validation protocol for the detection and enumeration of *L. pneumophila* by PCR. https://nf-validation.afnor.org/

Legionella outbreaks are commonly associated with buildings or structures that have complex water systems, including evaporative cooling systems, potable water, spas, industrial equipment and decorative fountains. Hospitals and care facilities are potential sources of *Legionella* infections that can affect patients.

Environmental surveillance and monitoring of *Legionella* spp. through routine control of water supply systems are crucial for risk assessment and the prevention of disease.

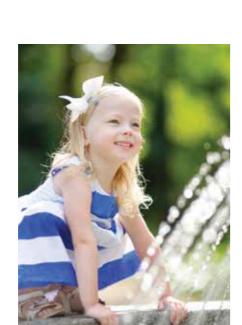
Diatheva provides a complete solution based on real-time PCR technology for *Legionella* control in water samples, developed to meet the needs for rapid *Legionella* detection and quantification.

The DI-Check Legionella pneumophila method is AFNOR validated on multiple PCR instruments: Applied Biosystems™ QuantStudio 96well (Thermo Fisher Scientific), CFX96 Touch™ Real-Time PCR Detection System (Biorad), CFX96 Touch™ Deepwell Detection System (Biorad) and Rotor-Gene Q (Qiagen).

Using the DI-Check Analysis Software for *L. pneumophila*, the interpretation of results will be automatically performed.

Field of application

- Detection of *Legionella* spp. and/or L. pneumophila in water samples
- Quantification of Legionella spp. and/or L. pneumophila in water samples
- Rapid Legionella outbreaks investigation





Speed Less than 4 h from sample to result

High performance Validated and tested on hot sanitary water, water from spas and cooling towers

Reliability Standards connected to the Reference Material

Maximum specificity 100% tested according to ISO/TS 12869

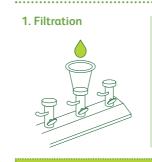
Convenience Complete solution including sample preparation and real-time PCR analysis

Flexibility Possibility to detect and quantify Legionella spp. and L. pneumophila simultaneously

Compatibility Flexible open system compatible with the major real-time PCR thermal cyclers available on the

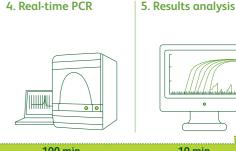
Complete and tailored solutions for entry into PCR technology: laboratory equipment, PCR machine and training

Workflow











Concentrate bacteria by filtering water sample

Rapid DNA isolation and purification using the DNApure Water Isolation kit

Add sample DNA and controls to PCR tubes containing amplification reagents

PCR amplification of Legionella spp./ L. pneumophila and Internal control

Total analysis time: less than 4 hours

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Technical specification

Technical specification				
	Quantitative assay	Qualitative assay		
Limit of detection	5 GU/PCR well	5 GU/PCR well		
Limit of quantification	25 GU/PCR well	nα		
Quantification range	25 - 25 000 GU/PCR well	nα		
Specificity	Wide list of bacterial species and exclusivity	tested for inclusivity		
Standard DNA	Standard curve connected to	Reference Material		
Internal Amplification Control in each sample	Detects the presence of inhibitors in the sample and checks the accuracy of negative results			
Thermal cycler compatibility	Require qPCR cycler with filter sets for FAM™ and VIC/HEX/JOE dyes			

Ordering information

Code	Product	Description	Size
MBK0080	DNApure Water Isolation kit (AFNOR)	DNA extraction kit	100 extractions
MBK0058	DI-Check Legionella spp. kit	real-time PCR kit	100 tests
MBK0081	DI-Check L. pneumophila kit (AFNOR)	real-time PCR kit	100 tests