Legionella

Legionella

Of all the environmental pathogens, *Legionella* and particularly *Legionella pneumophila* species is one of the most studied organisms due to its impact in large communities, and therefore its importance for public health and the enormous social and economic impact.

In all current laws and regulations on legionellosis prevention, *Legionella* testing is contemplated as one of the most important preventive methods, establishing culture isolation based on the ISO 11731 standard as the reference method. ielab's *Legionella*: Culture scheme simulates natural samples to be tested by the method implemented in the laboratory, to assess the analytical performance of the laboratory and the recovery rate of the used method.

However, culture isolation presents different drawbacks such as time-to-results that can be up to 10-12 days. Due to the need in many cases for rapid results, alternative methods such as those based on nucleic acid amplification (qPCR), have been described as valid and very useful tools for the detection of *Legionella*.

Spanish legislation 487/2022 becomes the new legislative cornerstone in relation to the prevention and control of this bacterium, gathering the main technical advances and covering aspects not included in the legislation until now.

In the *Legionella*: PCR scheme, samples contain inactivated cells that allow the assessment of both the efficiency and performance in the analytical phases of concentration, DNA extraction / purification and amplification.

Legionella: Culture

[ref. 990020]

Round I	Round II	Round III
Week 10 ***2nd March 2026***	*Week 19* ***4th May 2026***	*Week 40* ***28th September 2026***
2 samples (A and B): **Sample A:** *Legionella pneumophila* *Legionella* spp. **Sample B:** *Legionella pneumophila* *Legionella* spp.	**2 samples (A and B):** **Sample A:** *Legionella pneumophila* *Legionella* spp. **Sample B:** Culturable microorganisms at 22ºC Culturable microorganisms at 36ºC *Legionella pneumophila* *Legionella* spp.	**2 samples (A and B):** **Sample A:** *Legionella pneumophila* *Legionella* spp. **Sample B:** *Legionella pneumophila* *Legionella* spp.

Samples B will include natural matrix

Legionella: PCR

[ref. 990012]

Round I
Week 10 ***2nd March 2026***
3 samples (A, B and C): *Legionella pneumophila* *Legionella* spp. **Evaluation:** Concentration, extraction/purification and amplification of DNA

Legionella: Biofilm

[ref. 993001]

Round I
Week 25 ***15th June 2026***
3 samples (A, B and C): *Legionella pneumophila* *Legionella* spp. **Evaluation:** Detection and identification

Round not included in the scope of accreditation