

BACGene *Legionella* Multiplex

Legionella are gram negative bacteria, which often contaminate man-made water systems. Inhalation of airborne *Legionella* can lead to Legionnaire's disease, a particularly severe form of pneumonia.

The accepted ISO method is time consuming and requires an initial isolation period, plus an addition re-streak for the confirmation of presumptive positive colonies. For identification, additional methods have to be implemented.

BACGene *Legionella* Multiplex is an assay that simultaneously confirms and identifies *Legionella* at the following phylogenetic levels:

1. Screening for all species within the genus *Legionella*.
2. Identification of *Legionella pneumophila*.
3. Identification of the clinically most relevant serogroup, *Legionella pneumophila* subsp. *pneumophila* SG1.

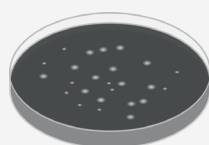
Key Benefits

- Faster analysis time compared to ISO methods
 - Simple thermal lysis step
 - Ready-to-use, pre-dispensed master mix
 - No re-streaking required
- Applicable for low and high throughput
- Compatible with BACGene *Salmonella* and BACGene *Listeria*. Analysis of *Salmonella*, *Listeria* and *Legionella* possible in the same PCR run
- UNG for risk reduction of amplicon contaminations
- Validated for:
 - Agilent AriaMx™
 - Bio-Rad CFX96 Touch™
 - Bio-Rad CFX96 Touch™ Deep Well

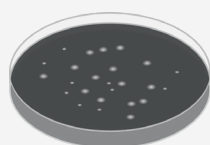
BACGene *Legionella* Multiplex Workflow

1. Choose presumptive positive colonies

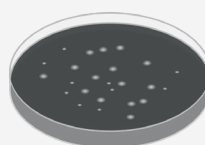
- Refer to ISO11731:2017 for isolation



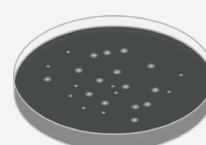
BCYE



BCYE+AB



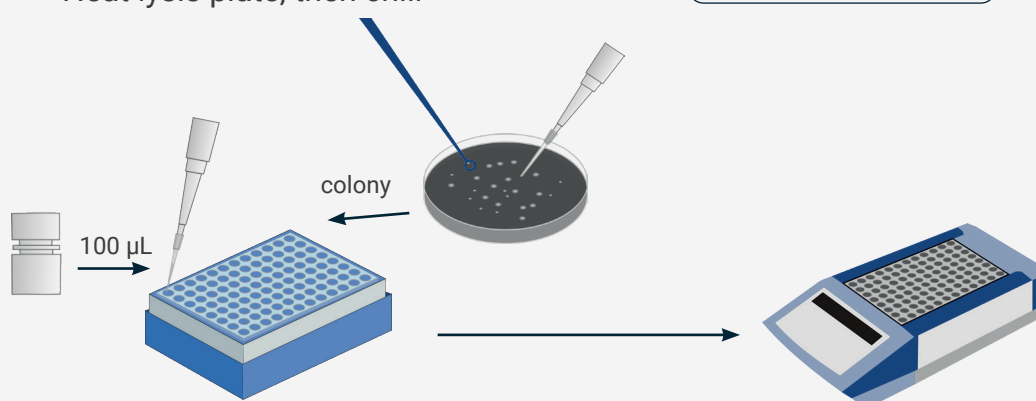
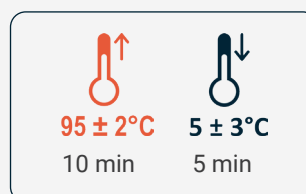
GVPC



MWY

2. Lysis procedure

- Transfer lysis buffer X in the plate
- Transfer a colony and resuspend it
- Seal the strips with domed caps
- Heat lysis plate, then chill



3. PCR procedure

(Work with one strip at time)

- Transfer 5 µL of lysate in PCR wells
- Seal the strips with domed caps
- Transfer the strip(s) to the cycler

