Bio Lp-1 LEGIONELLA DETECTION KIT
Cat No. BPD 2001

Bio Lp-1 technologies allow for the rapid, specific and sensitive detection and differentiation of Legionella by qPCR. The Bio Lp-1 Legionella detection kit is designed to reliably detect and differentiate between Legionella spp., Legionella pneumophila and Legionella pneumophila sg1 within a single reaction. The test targets specific and unique DNA sequences within the genome.

All PCR components are supplied in a lyophilised format, only requiring the addition of the DNA sample or control to the reaction. The Legionella PCR products are detected using FAM, HEX and ROX labelled fluorophores. An Internal Amplification Control (IAC) is included in the reaction and detected using a Cy5 fluorescent probe to indicate the PCR is functioning correctly. **Bio Lp-1 Legionella Quantification kit (cat # BPD 3001)** contains DNA standards for the absolute quantification of any Legionella DNA present in the sample tested.

DNA is extracted and purified from water samples using our sensitive extraction kit **Bio Lp-1 DNA Isolation Kit (cat # BPD 1001)**, resulting in excellent yields of high-quality DNA.

Quick-Start Protocol

The following procedure should be performed at room temperature (15-30 °C).

Note: If this is your fist time using the kit, please follow the instructions for positive control rehydration. Otherwise proceed to section 2.

1. POSITIVE CONTROL REHYDRATION

i. Briefly spin vial (red cap).
ii. Add 320 µl of rehydration buffer (green cap) to the vial.
iii. Incubate for 5 min at room temperature.
iv. Vortex for 10 sec followed by a brief centrifuge for 5 sec.

v. Positive control DNA should be stored at 2 to 8 ˚C until rehydrated. Store below -18 ˚C after rehydration.

2. QUALITATIVE REAL-TIME PCR SET-UP

i. Remove foil wrapping from the 12-well strips (2 x 12 well strips are included in each foil wrap).
ii. Place strips in PCR strip holder.
iii. Carefully remove the caps from each strip and leave them inverted on a clean surface.
iv. Add 19.2 µl of sample template to each well (in duplicate). The total volume after rehydration will be 20 µl.
v. Rehydrate the positive control DNA according to instructions in section 1. Add 19.2 µl of positive control DNA to the well for the positive control (in duplicate).
vi. Add 19.2 µl of PCR grade water to the well for the negative control (in duplicate).
vii. Carefully replace the caps back onto each strip.
viii. Gently tap the holder containing the 12-well strips against a flat surface to ensure the samples are at the bottom of the well.
ix. Transfer the strips to a plate vortex and vortex at medium speed (~1800 rpm) for 30 sec, followed by a short centrifuge step for 5 sec.
x. Transfer the strips and the holder to the real-time PCR instrument and begin run.
xi. For specific instructions for PCR set-up and exporting of results for your real-time PCR platform, refer to the full instructions at www.bioprobedx.com.