

LEGIONELLA SPP

REAL TIME DNA DETECTION KIT

PCR Real Time kit for the qualitative and quantitative detection of

Legionella spp DNA in environmental samples

Product code: IC-02-3001 (50 reactions) / IC-02-3003 (100 reactions)

Description

LEGIONELLA SPP REAL TIME DNA DETECTION KIT allows the quantitative and qualitative detection of the *Legionellaceae* DNA discriminating from the other bacterial species DNA that are normally present in the same biological habitat.

The PCR Real Time reaction detects a specific and preserved DNA sequence of the *Legionellaceae* family. The amplified fragment is detectable in real time through fluorescence generated by hybridization probe marked with FAM fluorophore. In each reaction is present an internal DNA control that amplifies with the sample and it is detected by hybridization probe marked with JOE fluorophore, to avoid false negative results.

Technical features

Number of tests	50/100 reactions
Kit content	Mix <i>Test LSP</i> (with duplex inhibition control) – 4 genomic standards– sterile H ₂ O DNase free
Specificity	the test is specific for <i>Legionellaceae</i> DNA (see below Tables 1 and 2).
Sensibility	LOQ: up to 25 Genomic Units (UG) of the species belonging to <i>Legionellaceae</i> family. LOD: up to 5 UG of the species belonging to <i>Legionellaceae</i> family.
Detection	probe labelled with fluorescent dyes (Taqman®) – FAM and JOE
Proficiency test	FAPAS-LEAP: Test report Y0909 – Potable Water <i>Legionella spp.</i> – June/July 2011

Table 1 - *Legionellaceae* strains used for testing the kit specificity:

Legionella pneumophila subsp. pneumophila - Sgp.1 - ATCC: 33152	Legionella bozemanii/Fluoribacter bozemanii - ATCC: 33217
Legionella pneumophila subsp. pneumophila - Sgp.2 - ATCC: 33154	Legionella bozemanii/Fluoribacter bozemanii - ATCC: 35545
Legionella pneumophila subsp. pneumophila - Sgp.3 - ATCC: 33155	Legionella cherrii - ATCC: 35252
Legionella pneumophila subsp. pneumophila - Sgp.6 - ATCC: 33215	Legionella dumoffii - ATCC: 33279
Legionella pneumophila subsp. pneumophila - Sgp.8 - ATCC: 35096	Legionella feeleeii - ATCC: 35072
Legionella pneumophila subsp. pneumophila - Sgp.9 - ATCC: 35289	Legionella gormanii/Fluoribacter gormanii - ATCC: 33297
Legionella pneumophila subsp. pneumophila - Sgp.10 - ATCC: 43283	Legionella hackeliae - ATCC: 35250
Legionella pneumophila subsp. pneumophila - Sgp.11 - ATCC: 43130	Legionella maceachernii/Tatlockia maceachernii - ATCC: 35300
Legionella pneumophila subsp. pneumophila - Sgp.12 - ATCC: 43290	Legionella micdadei/Tatlockia micdadei - ATCC: 33218
Legionella pneumophila subsp. pneumophila - Sgp.13 - ATCC: 43736	Legionella lansingensis - ATCC: 49751
Legionella pneumophila subsp. pneumophila - Sgp.14 - ATCC: 43703	Legionella longbeachae - ATCC: 33462
Legionella pneumophila - Sgp.7 - ATCC: 33823	Legionella jordanii - ATCC: 33623
Legionella pneumophila subsp. fraseri - Sgp.4 - ATCC: 33156	Legionella oakridgensis - ATCC: 33761
Legionella pneumophila subsp. fraseri - Sgp.5 - ATCC: 33216	Legionella parisiensis - ATCC: 35299
Legionella pneumophila subsp. Pascullei - Type strain/Sgp.5 - ATCC: 33737	Legionella sainthelensi - ATCC: 35248
Legionella anisa - ATCC: 35292	Legionella tucsonensis - ATCC: 49180
Legionella birminghamensis - ATCC: 43702	

Table 2 - Species (no *Legionellaceae*) used for testing the absence of amplification:

Aeromonas hydrophila - ATCC: 7966	Escherichia coli (DH5α)	Pseudomonas fluorescens - ATCC: 13525
Alcaligenes faecalis subsp. faecalis - ATCC: 8750	Klebsiella oxytoca - ATCC: 13182	Pseudomonas putida - ATCC: 12633
Bacillus subtilis subsp. subtilis - ATCC: 6051	Flavobacterium aquatile - ATCC: 11947	Serratia marcescens - ATCC: 13880
Burkholderia cepacia - ATCC: 25416	Listeria monocytogenes - ATCC: 15313	Stenotrophomas maltophilia/Xanthomonas maltophilia - ATCC: 13637
Clostridium perfringens - ATCC: 13124	Proteus vulgaris - ATCC: 29905	Xanthomonas campestris pv campestris - ATCC: 33913
Enterobacter aerogenes - ATCC: 13048	Pseudomonas aeruginosa - ATCC: 10145	