



Bioalarm Legionella kit validation

BIOALARM LEGIONELLA													
Detected bacterium	<i>Legionella pneumophila</i>												
Concentration method	Filtration membrane												
Detection method	Immunomagnetic capture and enzyme immunoassay												
Evaluated parameters	<p>The method has been tested with a total number of 17 <i>L. pneumophila</i> strains from different serogroups, 97 natural samples and 155 artificially contaminated samples. Furthermore, it has been tested in 17 <i>Legionella spp.</i> different species and in a wide range of microorganisms from other species, including <i>Escherichia coli</i>, <i>Clostridium perfringens</i>, <i>Enterococcus faecium</i>, <i>Candida albicans</i>, <i>Pseudomonas aeruginosa</i>, <i>Staphylococcus aureus</i>, <i>Salmonella typhi</i>, <i>Klebsiella pneumoniae</i>, <i>Pseudomonas fluorescens</i>, <i>Pseudomonas putida</i>, <i>Bacillus subtilis</i>, <i>Proteus vulgaris</i>, <i>Listeria monocitogenes</i>, <i>Enterobacter cloacae</i>, <i>Serratia marcescens</i> and <i>Caulobacter sp.</i> A positive reaction has been observed when concentrations superior to 10⁶ CFU/L of <i>E.coli</i>, <i>S.typhi</i>, <i>P.fluorescens</i>, <i>B.subtilis</i> and <i>L.adelaidensis</i>, concentrations superior to 10⁵ CFU/L of <i>L.beliardensis</i> and concentrations superior to 10⁴ CFU/L of <i>K.pneumoniae</i> have been tested</p> <table> <tr> <td>Sensitivity</td> <td>100 %</td> </tr> <tr> <td>Specificity</td> <td>93,0 %</td> </tr> <tr> <td>False positives</td> <td>2,7 %</td> </tr> <tr> <td>False negatives</td> <td>0 %</td> </tr> <tr> <td>Selectivity</td> <td>-0,13</td> </tr> <tr> <td>Efficiency</td> <td>98 %</td> </tr> </table>	Sensitivity	100 %	Specificity	93,0 %	False positives	2,7 %	False negatives	0 %	Selectivity	-0,13	Efficiency	98 %
Sensitivity	100 %												
Specificity	93,0 %												
False positives	2,7 %												
False negatives	0 %												
Selectivity	-0,13												
Efficiency	98 %												
Detection limit in potable waters	270 CFU/L												
Detection limit in cooling towers	280 CFU/L												
Sample volume	9,0 mL												
Analysis timing	50 min.												