

Supplementary Materials: *Legionella* Detection in Environmental Samples as an Example for Successful Implementation of qPCR

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Supplementary data

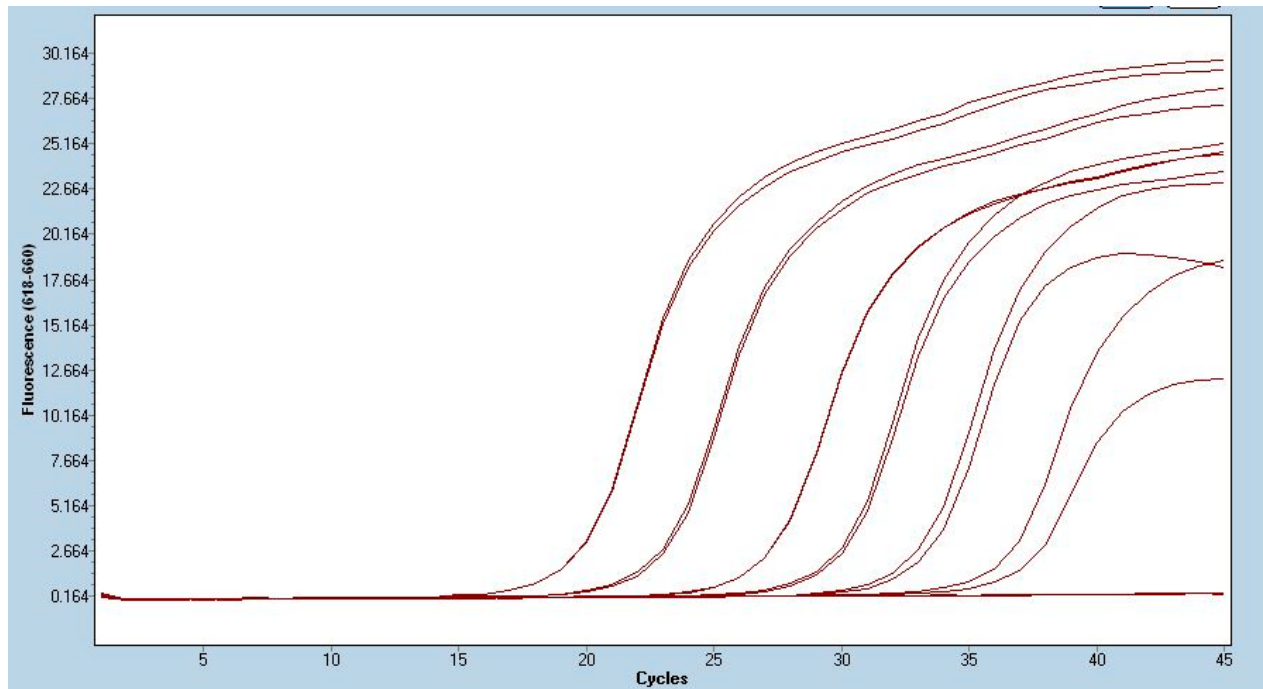


Figure S1. Standard curve for *mip*-gene based qPCR: serial dilutions ranging from 10^6 to 10^0 target gene copies were used in the qPCR.

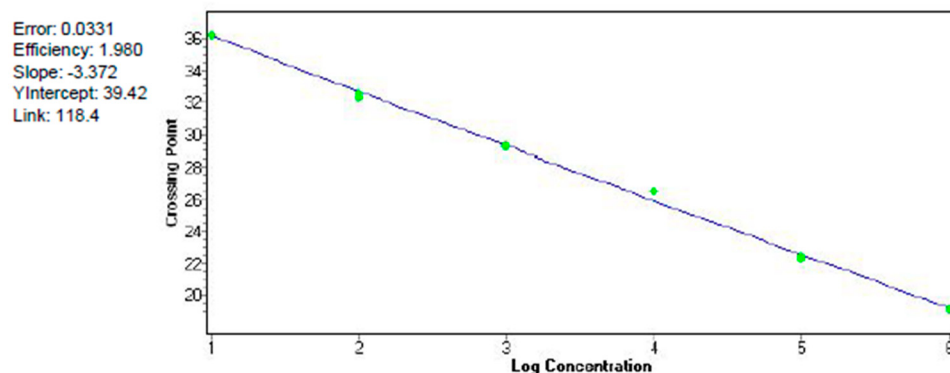


Figure S2. Linearity of *mip*-gene based qPCR: The qPCR shows a LOD of 2×10^2 GU/100ml.

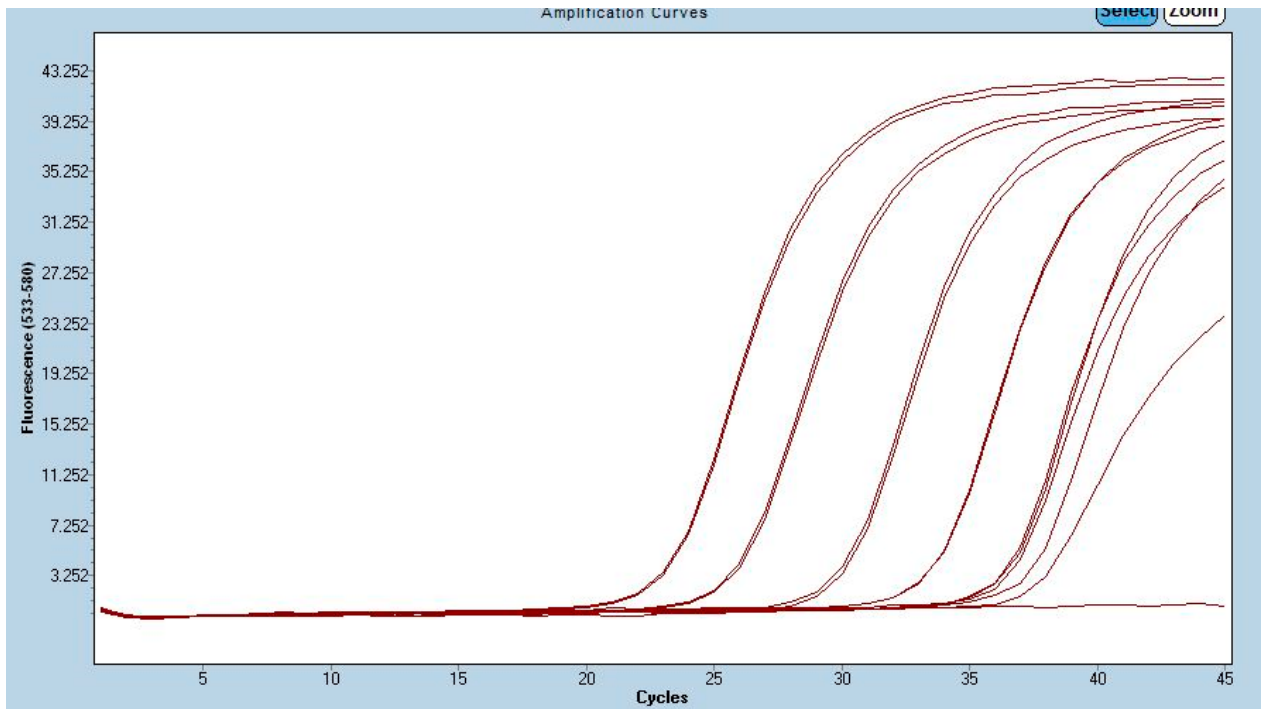


Figure S3. Standard curve for *wzm*-gene based qPCR: serial dilutions ranging from 10^6 to 10^0 target gene copies were used in the qPCR.

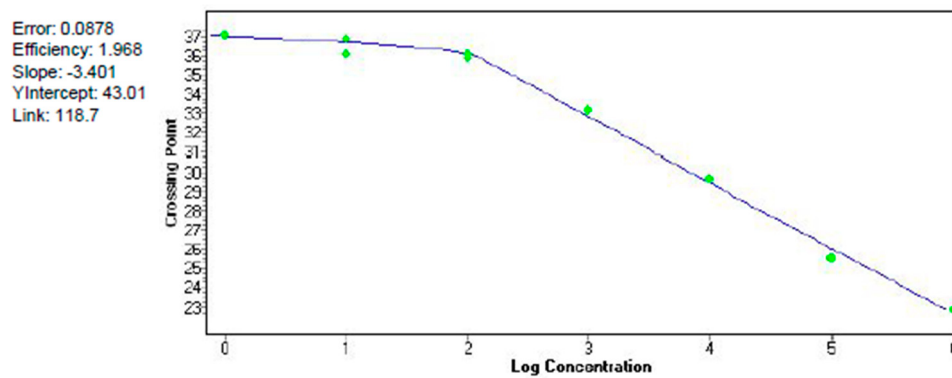


Figure S4. Linearity of *wzm*-gene based qPCR: The qPCR shows a LOD of 2×10^3 GU/100ml.

Table S1. Results for qPCR and culture for *L. pneumophila* and *L. pneumophila* sg1. LOD for qPCR was 2×10^2 GU/100ml for *mip* (*L. pneumophila*) and 2×10^3 GU/100ml for *wzm* (*L. pneumophila* sg1), values below LOD were set to zero. LOD for culture was 1/100ml.

sample nr.	sample origin	qPCR				culture			
		<i>L. pneumophila</i>		<i>L. pneumophila</i> sg1		<i>L. pneumophila</i> sg 2-15		<i>L. pneumophila</i> sg1	
1703222	cooling water	3,84E+04	positive	2,88E+04	positive	0,00E+00	negative	0,00E+00	negative
1703221	cooling water	1,94E+04	positive	0,00E+00	negative	0,00E+00	negative	0,00E+00	negative
1703282	cooling water	1,98E+03	positive	0,00E+00	negative	1,60E+02	positive	0,00E+00	negative
1703279	cooling water	2,15E+03	positive	0,00E+00	negative	2,60E+02	positive	0,00E+00	negative
1703733	cooling tower	7,53E+04	positive	2,45E+04	positive	5,50E+04	positive	0,00E+00	negative
1703734	cooling tower	1,37E+03	positive	0,00E+00	negative	8,00E+02	positive	0,00E+00	negative
1703556	cooling tower	1,57E+03	positive	1,39E+03	positive	0,00E+00	negative	8,60E+01	positive
1703557	cooling tower	2,00E+03	positive	1,51E+03	positive	0,00E+00	negative	7,20E+01	positive
1703558	cooling tower	3,56E+03	positive	4,08E+03	positive	0,00E+00	negative	5,60E+01	positive
1703059	cooling water	0,00E+00	negative	0,00E+00	negative	5,00E+00	positive	0,00E+00	negative
1704378	drinking water	3,22E+02	positive	0,00E+00	negative	0,00E+00	negative	9,50E+01	positive
1704415	drinking water	4,06E+02	positive	0,00E+00	negative	8,90E+01	positive	0,00E+00	negative
1704469	drinking water	2,20E+03	positive	0,00E+00	negative	6,50E+01	positive	0,00E+00	negative
1704470	drinking water	4,70E+02	positive	0,00E+00	negative	1,40E+01	positive	0,00E+00	negative
1704471	drinking water	3,53E+02	positive	0,00E+00	negative	1,30E+01	positive	0,00E+00	negative
1704473	drinking water	4,66E+03	positive	0,00E+00	negative	8,70E+01	positive	0,00E+00	negative
1704474	drinking water	6,67E+03	positive	0,00E+00	negative	3,60E+02	positive	0,00E+00	negative
1704475	drinking water	4,47E+03	positive	0,00E+00	negative	1,20E+03	positive	0,00E+00	negative
1704476	drinking water	3,64E+03	positive	5,48E+03	positive	1,40E+02	positive	0,00E+00	negative
1704477	drinking water	4,17E+02	positive	0,00E+00	negative	6,80E+01	positive	0,00E+00	negative
1704478	drinking water	8,21E+02	positive	0,00E+00	negative	2,40E+01	positive	0,00E+00	negative
1704479	drinking water	5,42E+02	positive	0,00E+00	negative	8,20E+01	positive	0,00E+00	negative
1704480	drinking water	2,38E+02	positive	0,00E+00	negative	6,20E+01	positive	0,00E+00	negative
1704484	drinking water	2,18E+02	positive	0,00E+00	negative	1,10E+01	positive	0,00E+00	negative
1704729	cooling tower	0,00E+00	negative	0,00E+00	negative	0,00E+00	negative	0,00E+00	negative
1704730	cooling tower	0,00E+00	negative	0,00E+00	negative	0,00E+00	negative	0,00E+00	negative
1704731	cooling tower	0,00E+00	negative	0,00E+00	negative	0,00E+00	negative	0,00E+00	negative
1704732	cooling tower	0,00E+00	negative	0,00E+00	negative	0,00E+00	negative	0,00E+00	negative
1704733	cooling tower	0,00E+00	negative	0,00E+00	negative	0,00E+00	negative	0,00E+00	negative
1704734	cooling tower	0,00E+00	negative	0,00E+00	negative	0,00E+00	negative	0,00E+00	negative
1704614	cooling tower	2,97E+05	positive	0,00E+00	negative	0,00E+00	negative	4,00E+03	positive
1704932	cooling tower	3,05E+02	positive	0,00E+00	negative	0,00E+00	negative	0,00E+00	negative
1704933	cooling tower	1,73E+03	positive	0,00E+00	negative	0,00E+00	negative	0,00E+00	negative
1705242	cooling water	0,00E+00	negative	0,00E+00	negative	0,00E+00	negative	0,00E+00	negative
1705243	cooling water	0,00E+00	negative	0,00E+00	negative	0,00E+00	negative	0,00E+00	negative
1705244	cooling water	0,00E+00	negative	3,65E+05	positive	0,00E+00	negative	0,00E+00	negative
1705245	cooling tower	9,27E+03	positive	2,78E+03	positive	0,00E+00	negative	0,00E+00	negative
1705246	cooling tower	4,32E+02	positive	0,00E+00	negative	0,00E+00	negative	0,00E+00	negative
1704319	cooling tower	7,87E+02	positive	0,00E+00	negative	0,00E+00	negative	1,60E+02	positive
1704322	cooling tower	5,31E+03	positive	0,00E+00	negative	6,00E+02	positive	0,00E+00	negative
1705706	cooling tower	0,00E+00	negative	0,00E+00	negative	0,00E+00	negative	0,00E+00	negative
1705707	cooling tower	0,00E+00	negative	0,00E+00	negative	0,00E+00	negative	0,00E+00	negative
1705708	cooling tower	0,00E+00	negative	0,00E+00	negative	0,00E+00	negative	0,00E+00	negative
1706248	other	0,00E+00	negative	0,00E+00	negative	0,00E+00	negative	0,00E+00	negative
1606342	cooling water	0,00E+00	negative	6,01E+03	positive	1,00E+05	positive	0,00E+00	negative
1606343	cooling water	0,00E+00	negative	0,00E+00	negative	0,00E+00	negative	0,00E+00	negative
1606344	cooling water	0,00E+00	negative	0,00E+00	negative	0,00E+00	negative	0,00E+00	negative
1706602	cooling water	4,75E+02	positive	1,88E+05	positive	0,00E+00	negative	0,00E+00	negative
1706603	cooling water	1,12E+03	positive	0,00E+00	negative	1,60E+03	positive	0,00E+00	negative
1706604	cooling water	1,54E+03	positive	0,00E+00	negative	6,00E+02	positive	0,00E+00	negative
1706605	cooling water	6,77E+02	positive	0,00E+00	negative	3,00E+02	positive	0,00E+00	negative
1706633	other	0,00E+00	negative	0,00E+00	negative	0,00E+00	negative	0,00E+00	negative

1706634	other	5,54E+02	positive	0,00E+00	negative	0,00E+00	negative	0,00E+00	negative
1706744	cooling water	1,44E+03	positive	1,09E+03	positive	0,00E+00	negative	0,00E+00	negative
1706745	cooling water	1,55E+03	positive	0,00E+00	negative	0,00E+00	negative	0,00E+00	negative
1706746	cooling water	0,00E+00	negative	0,00E+00	negative	0,00E+00	negative	0,00E+00	negative
1706747	cooling water	5,45E+02	positive	0,00E+00	negative	0,00E+00	negative	0,00E+00	negative
1706748	cooling water	2,19E+02	positive	0,00E+00	negative	0,00E+00	negative	0,00E+00	negative
1706749	cooling water	8,04E+02	positive	1,84E+04	positive	0,00E+00	negative	0,00E+00	negative
1706924	other	0,00E+00	negative	1,79E+07	positive	0,00E+00	negative	4,00E+00	positive
1707843	other	0,00E+00	negative	0,00E+00	negative	2,00E+00	positive	0,00E+00	negative
1706936	drinking water	3,89E+02	positive	0,00E+00	negative	1,40E+01	positive	0,00E+00	negative
170784	cooling water	0,00E+00	negative	6,64E+05	positive	0,00E+00	negative	0,00E+00	negative
170785	cooling water	0,00E+00	negative	0,00E+00	negative	0,00E+00	negative	0,00E+00	negative
170786	cooling water	0,00E+00	negative	1,74E+03	positive	0,00E+00	negative	0,00E+00	negative
170787	cooling water	0,00E+00	negative	0,00E+00	negative	0,00E+00	negative	0,00E+00	negative
1707175	cooling water	2,01E+03	positive	1,08E+03	positive	0,00E+00	negative	3,10E+03	positive
1707176	cooling water	4,14E+03	positive	1,48E+03	positive	2,40E+03	positive	0,00E+00	negative
1707177	cooling water	7,05E+03	positive	3,06E+03	positive	0,00E+00	negative	3,50E+03	positive
1707178	cooling water	3,29E+03	positive	1,10E+03	positive	4,40E+03	positive	0,00E+00	negative
1707179	cooling water	4,19E+04	positive	5,89E+03	positive	0,00E+00	negative	0,00E+00	negative
1707180	cooling water	1,10E+04	positive	1,57E+03	positive	0,00E+00	negative	0,00E+00	negative
1707190	drinking water	1,68E+02	positive	0,00E+00	negative	2,20E+01	positive	0,00E+00	negative
1707194	drinking water	7,63E+02	positive	0,00E+00	negative	1,60E+02	positive	0,00E+00	negative
1707195	drinking water	0,00E+00	negative	3,04E+04	positive	1,60E+01	positive	0,00E+00	negative
1707196	drinking water	2,59E+02	positive	0,00E+00	negative	8,80E+01	positive	0,00E+00	negative
1707620	other	2,14E+04	positive	0,00E+00	negative	6,00E+01	positive	0,00E+00	negative
1707622	other	6,94E+02	positive	0,00E+00	negative	0,00E+00	negative	4,00E+01	positive
1707393	other	0,00E+00	negative	0,00E+00	negative	0,00E+00	negative	2,00E+00	positive
1707224	other	0,00E+00	negative	0,00E+00	negative	0,00E+00	negative	3,20E+01	positive
1707174	other	0,00E+00	negative	0,00E+00	negative	0,00E+00	negative	0,00E+00	negative
1707076	drinking water	0,00E+00	negative	0,00E+00	negative	6,00E+00	positive	0,00E+00	negative
1707077	other	0,00E+00	negative	0,00E+00	negative	2,00E+00	positive	0,00E+00	negative