

**PCR-/NAT *Legionella pneumophila*
 (RV 536) Mai 2015**



Tabelle 1: Probenzusammensetzung und erwartetes Ergebnis.

Sample composition and expected results.

	<i>Erwartet / expected</i>		<i>Probenzusammensetzung / Sample composition</i>
1515361	+	61	<i>Legionella pneumophila</i> SG2 (~ 1x10 ³ CFU/mL)
1515362	++	61	<i>Legionella pneumophila</i> SG2 (~ 1x10 ⁴ CFU/mL)
1515363	+++	61	<i>Legionella pneumophila</i> SG2 (~ 1x10 ⁵ CFU/mL)
1515364	Ø	62	<i>Escherichia coli</i> K12

Tabelle 2: Häufigkeit der Mitteilung verschiedener Befunde.

Absolute numbers of reported individual results.

<i>n = 105</i>	<i>Probennummer (Sample no.)</i>					<i>Inhibition</i>			
<i>Befund Result</i>	1515361	1515362	1515363	1515364		1515361	1515362	1515363	1515364
Positiv	37¹⁾	87	101	2	n.d.	1	1	1	1
Negativ	66¹⁾	17	4	103	nein no	104	104	104	104
Fraglich Questionable	2	1	0	0	ja yes	0	0	0	0

Tabelle 3: Häufigkeit richtig positiver und richtig negativer NAT-Befunde bei Anwendern verschiedener Methoden.

Absolute numbers and relative frequency of reported true positive and true negative results among various NAT methods.

NAT-Methode [Code] (total number *)	NAT richtig positiv <i>True positive results</i>			NAT richtig negativ <i>True negative results</i>		
	Absolut <i>Absolute</i>	Relativ <i>Relative</i>	%	Absolut <i>Absolute</i>	Relativ <i>Relative</i>	%
LightMix Legionella [25] (n = 8)	19	19 / 23 §	83	8	8 / 8	100
GeneProof <i>L.pneumophila</i> [26] (n = 7)	16	16 / 21	76	7	7 / 7	100
Other commercial tests [27] (n= 46)	95	95 / 136 §	70	44	44 / 46	96
In house PCR assay [28] (n= 45)	99	99 / 135	73	45	45 / 45	100
Andere / k.A. / other [29] (n= 1)	2	2 / 3	67	1	1 / 1	100

§ Due to reporting questionable results, the number of true results (denominator in the „relative“ column) has been reduced.

* Durch Mehrfachnennung oder fehlende Angabe kann die absolute Zahl der Ergebnisse (Tab. 2) von der Anzahl der Teilnehmer abweichen.
 Due to reporting results of multiple assay systems or missing specifications, the effective numbers are not correlating with the number of participants

Comments: ¹⁾ As sample #1515361 contained a low number of *Legionella pneumophila* target organisms, negative PCR results were not rated “false negative”, but the participants may consider to improve the analytical sensitivity of corresponding PCR assays.