

**PCR-/NAT *Legionella pneumophila*
 (RV 536) November 2010**



Tabelle 1: Probenzusammensetzung und erwartetes Ergebnis.
Sample composition and expected results.

Gruppe A	Erwartet / expected		Probenzusammensetzung / Sample composition
1025361	∅	62	<i>Escherichia coli</i> K12
1025362	∅	62	<i>Legionella bozemanii</i> (~ 1x10 ⁵ CFU/mL)
1025363	∅	62	<i>Legionella bozemanii</i> (~ 1x10 ⁴ CFU/mL)
1025364	++	61	<i>Legionella pneumophila</i> SG1 (~ 1x10 ⁵ CFU/mL)

Tabelle 2: Häufigkeit der Mitteilung verschiedener Befunde.
Absolute numbers of reported individual results.

n = 64	Probennummer (Sample no.)					Inhibition			
	1025361	1025362	1025363	1025364		1025361	1025362	1025363	1025364
Befund <i>Result</i>									
Positiv	0	10 ¹⁾	6 ¹⁾	61	n.d.	1	1	1	1
Negativ	64	53	57	3	nein <i>no</i>	63	63	63	63
Fraglich <i>Questionable</i>	0	1	1	0	ja <i>yes</i>	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>	%
BD ProbeTec Legionella [26] (n = 1)	1	1 / 1	100	3	3 / 3	100
Other commercial tests [27] (n = 19)	18	18 / 19	95	56	56 / 57	98
In house PCR assay [28] (n = 43)	41	41 / 43 [§]	87	112	112 / 127 [§]	88
Andere / k.A. / other [29] (n = 2)	2	2 / 2	100	6	6 / 6	100

[§] Due to reporting questionable results, the number of true results (denominator in the "relative" column) have been reduced.

Comments: ¹⁾ Ten and six of the 64 participants reported false-positive results for sample # 1025362 and # 1025363 respectively. This could be due to a "simple" cross-contamination event and/or a cross-reactivity of the primer and probe sequences of the "*Legionella pneumophila* - specific" in-house PCR assays.