

**PCR-/NAT *Legionella pneumophila*
 (RV 536) November 2022**



Tabelle 1: Probenzusammensetzung und erwartetes Ergebnis.

Sample composition and expected results.

	<i>Erwartet / expected</i>		<i>Probenzusammensetzung / Sample composition</i>
2225361	Ø	62	<i>Escherichia coli</i> K12
2225362	+++	61	<i>Legionella pneumophila</i> SG1 (~ 1x10 ⁵ CFU/mL)
2225363	Ø	62	<i>Legionella londiniensis</i> (~ 5x10 ⁵ CFU/mL)
2225364	++	61	<i>Legionella pneumophila</i> SG3 (~ 5x10 ⁴ CFU/mL)

Tabelle 2: Häufigkeit der Mitteilung verschiedener Befunde.

Absolute numbers of reported individual results.

<i>n = 127</i>	Probennummer (Sample no.)					Inhibition			
	2225361	2225362	2225363	2225364		2225361	2225362	2225363	2225364
Befund <i>Result</i>									
Positiv	1	125	2	126	n.d.	2	2	2	2
Negativ	125	2	124	1	nein <i>no</i>	125	125	124	125
Fraglich <i>Questionable</i>	1	0	1	0	ja <i>yes</i>	0	0	1	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>			
	2225362		2225364		2225361		2225363	
	Absolut <i>Absolute</i>	%	Absolut <i>Absolute</i>	%	Absolut <i>Absolute</i>	%	Absolut <i>Absolute</i>	%
AID CAP Bacteria (n= 7)	7	100	7	100	7	100	7	100
ARGENE L. pneumo/Cc R-GENE (n= 4)	4	100	4	100	4	100	4	100
Amplex eazyplex PneumoBug exp.(n= 3)	3	100	3	100	3	100	3	100
AmpliGnost L. pneumophila (n= 5)	5	100	5	100	5	100	5	100
FILMARRAY Pneumonia Panel (n= 1)	1	100	1	100	1	100	1	100
BioGx auf BD Max (n= 5)	4	80	5	100	4	80	5	100
ReadyMax Atypical Pneumonia 1 (n= 1)	1	100	1	100	1	100	1	100

ReadyMax b-CAP Assay (n= 2)	2	100	2	100	2	100	2	100
Diagenode R-DiaLeg (n= 1)	1	100	1	100	1	100	1	100
FTD Atypical CAP (n= 1)	1	100	1	100	1	100	1	100
GeneProof L. pneumophila (n= 6)	6	100	6	100	6	100	5**	83
Gerbion Diarella Legionella (n= 1)	1	100	1	100	1	100	1	100
Ingenetix BactoReal L.pneumophila (n= 2)	2	100	2	100	2	100	2	100
Luminex Resp. Pathogen Panel (n= 1)	1	100	1	100	1	100	1	100
ampliCube Resp. Panel 1 (n= 1)	1	100	1	100	1	100	1	100
Seegene Allplex Resp. Panel 4 (n= 19)	18	95	19	100	19	100	19	100
Tib Molbiol LightMix Legionella (n= 9)	9	100	9	100	9	100	9	100
RIDAGENE Legionella (n= 8)	8	100	8	100	7*	88	8	100
In house PCR assay (n= 34)	34	100	33	97	34	100	32	94
Other commercial tests (n= 16)	16	100	16	100	16	100	16	100

* Questionable ** Inhibition

Comments:

1. Only Legionella spp. detection was performed by four laboratories. All reported results were correct.
2. Unter "Andere kommerzielle Testsysteme" sind folgende Testsysteme aufgeführt: Seegene Allplex PneumoBacter Assay (2x), AnDiatec Quidel L. pneumophila (1x), MIKROGEN ampliCube Respiratory Bacterial Panel 1.1 (3x), MIKROGEN alphaCube Legionella (1x), r-Biopharm RIDAGENE CAP Bac (2x), QIAGEN QIAstat-Dx Respiratory Sars-CoV-2 Panel (2x), CerTest VIASURE C. pneumonia, M. pneumonia and L. pneumophila Real Time PCR Detection Kit (1x) und PathoFinder RespiFinder 2Smart (1x).