

**PCR-/NAT *Legionella pneumophila*
 (RV 536) November 2024**



Tabelle 1: Probenzusammensetzung und erwartetes Ergebnis.

Sample composition and expected results.

Proben Nr.	Erwartet / expected		Probenzusammensetzung / Sample composition
536A 241015 01	+	61	<i>Legionella pneumophila</i> SG1 (~ 5x10 ³ CFU/mL)
536A 241015 02	∅	62	<i>Escherichia coli</i> K12
536A 241015 03	++	61	<i>Legionella pneumophila</i> SG1 (~ 5x10 ⁴ CFU/mL)
536A 241015 04	+++	61	<i>Legionella pneumophila</i> SG1 (~ 5x10 ⁵ CFU/mL)

Tabelle 2: Häufigkeit der Mitteilung verschiedener Befunde.

Absolute numbers of reported individual results.

<i>n</i> = 123	Proben Nr. (Sample no.)					Inhibition			
	01	02	03	04		01	02	03	04
Befund <i>Result</i>									
Positiv	105	0	121	123	n.d.	2	2	2	2
Negativ	18	123	2	0	nein <i>no</i>	121	121	121	121
Fraglich <i>Questionable</i>	0	0	0	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	
	01		03		04		02	
	Absolut <i>Absolute</i>	%	Absolut <i>Absolute</i>	%	Absolut <i>Absolute</i>	%	Absolut <i>Absolute</i>	%
AID CAP Bacteria (n= 4)	3	75	4	100	4	100	4	100
ARGENE L. pneumo/Cc R-GENE (n= 2)	2	100	2	100	2	100	2	100
Amplex eazyplex PneumoBug exp. (n= 4)	2	50	3	75	4	100	4	100
AmpliGnost L. pneumophila (n= 3)	2	67	2	67	3	100	3	100
AusDiagnostics Resp. Pathogens 24-well (n= 1)	1	100	1	100	1	100	1	100
BioGx auf BD Max (n= 4)	4	100	4	100	4	100	4	100
BioFire FILMARRAY PN plus (n= 2)	2	100	2	100	2	100	2	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
GeneProof L. pneumophila (n= 4)	3	75	4	100	4	100	4	100
Gerbion Diarella Legionella (n= 1)	1	100	1	100	1	100	1	100
Luminex Resp. Pathogen Panel (n= 8)	7	88	8	100	8	100	8	100
ampliCube Resp. panel 1.1/1.1LC (n= 7)	5	71	7	100	7	100	7	100
QIAstat-Dx Resp. Sars CoV-2 (n= 2)	1	50	2	100	2	100	2	100
Seegene Allplex Pneumobacter (n= 9)	8	89	9	100	9	100	9	100
Seegene Allplex Resp. Panel 4 (n= 18)	16	89	18	100	18	100	18	100
Tib Molbiol LightMix Legionella (n= 6)	4	67	6	100	6	100	6	100
RIDAGENE CAP Bac (n= 5)	5	100	5	100	5	100	5	100
RIDAGENE Legionella Kit (n= 8)	8	100	8	100	8	100	8	100
In house PCR assay (n= 19)	17	89	19	100	19	100	19	100
Other commercial tests (n= 13)	11	85	13	100	13	100	13	100

The following tests are listed under "Other commercial tests": Roche Cobas 5800, 6800 oder 8800 (2x), Roche UC-TIB-Respi-Bac2 (L.pn, C.pn, M.pn) (2x), AnDiatec Quidel L. pneumophila (1x), CerTest VIASURE C. pneumonia, M. pneumonia and L. pneumophila Real Time PCR Detection Kit (1x), ELITechGroup Respiratory Bacterial ELITE MGB Panel (1x), Genesig Realtime PCR Detection for L.pn (1x), Luminex NxTAG Respiratory Pathogen Panel + SARS-CoV-2 (1x), MIKROGEN alphaCube Legionella (1x), PathoFinder RespiFinder 2Smart (1x) and r-Biopharm RIDA UNITY CAP Bac RUO (1x).

Comments:

1. Only Legionella spp. detection was performed by three laboratories. All reported results were correct.