

PCR-/NAT *Legionella pneumophila* (RV 536) Mai 2025



Tabelle 1: Probenzusammensetzung und erwartetes Ergebnis.

Sample composition and expected results.

Proben Nr.	Erwartet / expected		Probenzusammensetzung / Sample composition
536A 250520 01	+	61	<i>Legionella pneumophila</i> SG1 (~ 5x10 ³ CFU/mL)
536A 250520 02	+++	61	<i>Legionella pneumophila</i> SG1 (~ 5x10 ⁵ CFU/mL)
536A 250520 03	++	61	<i>Legionella pneumophila</i> SG1 (~ 5x10 ⁴ CFU/mL)
536A 250520 04	Ø	62	<i>Escherichia coli</i> K12

Tabelle 2: Häufigkeit der Mitteilung verschiedener Befunde.

Absolute numbers of reported individual results.

<i>n</i> = 147		Proben Nr. (Sample no.)				Inhibition				
Befund Result		01	02	03	04		01	02	03	04
Positiv	127	147	147	147	0	n.d.	3	3	3	3
Negativ	19	0	0	0	147	nein no	144	144	144	144
Fraglich Questionable	1	0	0	0	0	ja yes	0	0	0	0

Tabelle 3: Häufigkeit richtig positiver und richtig negativer NAT-Befunde bei Anwenden 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 True positive results						NAT richtig negativ	
	01		02		03		04	
	Absolut Absolute	%	Absolut Absolute	%	Absolut Absolute	%	Absolut Absolute	%
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 eazypex PneumoBug expert (n= 5)	1	20	5	100	5	100	5	100
AmpliGnost L. pneumophila (n= 3)	3	100	3	100	3	100	3	100
AusDiagnostics Resp. Pathogens 24-well (n=2)	1	50	2	100	2	100	2	100
BioGx auf BD Max (n= 5)	5	100	5	100	5	100	5	100
BioFire FILMARRAY PN plus (n= 1)	1	100	1	100	1	100	1	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
CerTest VIASURE C.pn, M.pn, L.pn (n= 5)	5	100	5	100	5	100	5	100
GeneProof L. pneumophila (n= 7)	6	86	7	100	7	100	7	100
Gerbion Diarella Legionella (n= 3)	3	100	3	100	3	100	3	100
Luminex Resp. Pathogen Panel (n= 7)	5	71	7	100	7	100	7	100
ampliCube Resp. panel 1.1/1.1LC (n= 9)	7	89 [§]	9	100	9	100	9	100
QIAstat-Dx Resp. Sars-CoV-2 (n= 2)	1	50	2	100	2	100	2	100
Roche UC-TIB-Respi-BAC-2 (n= 4)	4	100	4	100	4	100	4	100
Seegene Allplex Pneumobacter (n= 10)	8	80	10	100	10	100	10	100
Seegene Allplex Resp. Panel 4 (n= 23)	19	83	23	100	23	100	23	100
TIB Molbiol LightMix Legionella pn.(n= 6)	6	100	6	100	6	100	6	100
RIDAGENE CAP Bac (n= 7)	7	100	7	100	7	100	7	100
r-Biopharm RIDAGENE Legionella Kit (n= 9)	9	100	9	100	9	100	9	100
In house PCR assay (n= 22)	20	91	22	100	22	100	22	100
Other commercial tests (n= 8)	8	100	8	100	8	100	8	100

[§] Fraglich Due to reporting questionable results, the number of true results has been reduced.

Comments:

- The following tests are listed under "Other commercial tests": ELITechGroup Respiratory Bacterial ELITe MGB Panel (2x), PathoFinder RespiFinder 2Smart (1x), MIKROGEN alphaCube Legionella (1x), Progenie RealCycler L. pneumophila (LEGI-UX) (1x), Bioeksen Bio-Speedy Legionella spp, L. pneumophila Real-Time PCR (1x), Roche cobas 6800 (1x) and Vitassay qPCR Legionella pneumophila (1x).
- Only Legionella spp. detection was performed by three laboratories. All reported results were correct.