

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



Tabelle 1: Probenzusammensetzung und erwartetes Ergebnis.

Sample composition and expected results.

Proben Nr.	Erwartet / expected		Probenzusammensetzung / Sample composition
	Ø	62	
536A 240521 01	Ø	62	<i>Legionella gormanii</i> (~ 5x10 ⁴ CFU/mL)
536A 240521 02	+++	61	<i>Legionella pneumophila</i> SG1 (~ 5x10 ⁵ CFU/mL)
536A 240521 03	Ø	62	<i>Escherichia coli</i> K12
536A 240521 04	+	61	<i>Legionella pneumophila</i> SG1 (~ 5x10 ³ CFU/mL)

Tabelle 2: Häufigkeit der Mitteilung verschiedener Befunde.

Absolute numbers of reported individual results.

n = 132	Proben Nr. (Sample no.)					Inhibition			
	01	02	03	04		01	02	03	04
Befund <i>Result</i>									
Positiv	4	132	1	100	n.d.	4	4	4	4
Negativ	128	0	131	32	nein <i>no</i>	128	128	128	128
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 <i>True negative results</i>			
	02		04		01		03	
	Absolut <i>Absolute</i>	%	Absolut <i>Absolute</i>	%	Absolut <i>Absolute</i>	%	Absolut <i>Absolute</i>	%
AID CAP Bacteria (n= 6)	6	100	4	67	5	83	5	83
ARGENE L. pneumo/Cc R-GENE (n= 2)	2	100	2	100	2	100	2	100
Amplex eazyplox PneumoBug exp.(n= 5)	5	100	1	20	5	100	5	100
AmpliGnost L. pneumophila (n= 3)	3	100	1	33	3	100	3	100
AusDiagnostics Resp. Pathogens 24-well (n =2)	2	100	2	100	2	100	2	100
BioGx auf BD Max (n= 3)	3	100	3	100	3	100	3	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
Diagenode R-DiaLeg (n= 1)	1	100	1	100	1	100	1	100
GeneProof L. pneumophila (n= 5)	5	100	5	100	4	80	5	100
Gerbion Diarella Legionella (n= 2)	2	100	2	100	2	100	2	100
Ingenetix BactoReal L.pn. (n= 1)	1	100	1	100	1	100	1	100
Luminex Resp. Pathogen Panel (n= 6)	6	100	3	50	6	100	6	100
ampliCube Resp. panel 1.1/1.1LC (n= 8)	8	100	6	75	8	100	8	100
QIAstat-Dx Resp. Sars CoV-2 (n= 3)	3	100	0	0	3	100	3	100
Seegene Allplex Pneumobacter (n= 9)	9	100	7	78	9	100	9	100
Seegene Allplex Resp. Panel 4 (n= 20)	20	100	15	75	20	100	20	100
Tib Molbiol LightMix Legionella (n= 5)	5	100	2	40	5	100	5	100
RIDAGENE CAP Bac (n= 6)	6	100	6	100	6	100	6	100
RIDAGENE Legionella Kit (n= 7)	7	100	4	57	7	100	7	100
<i>In house</i> PCR assay (n= 23)	23	100	21	91	22	96	23	100
Other commercial tests (n= 11)	11	100	10	91	10	91	11	100

Comments:

1. The following tests are listed under "Other commercial tests": CerTest VIASURE C. pneumonia, M. pneumonia and L. pneumophila Real Time PCR Detection Kit (4x), AnDiatec Quidel L. pneumophila (1x), DNA Technology L. pneumophila real-time PCR Detection Kit (1x), ELITechGroup Respiratory Bacterial ELITe MGB Panel (1x), Luminex NxTAG Respiratory Pathogen Panel + SARS-CoV-2 (1x), PathoFinder RespiFinder 2Smart (1x), Roche Cobas 5800 (1x) and Vitassay qPCR Legionella pneumophila (1x).
2. Only Legionella spp. detection was performed by two laboratories. All reported results were correct.