

PCR-/NAT *Legionella pneumophila*
(RV 536) Mai 2023



Tabelle 1: Probenzusammensetzung und erwartetes Ergebnis.

Sample composition and expected results.

Proben Nr.	Erwartet / expected		Probenzusammensetzung / Sample composition
536 230523 01	+++	61	<i>Legionella pneumophila</i> SG1 (~ 5x10 ⁵ CFU/mL)
536 230523 02	++	61	<i>Legionella pneumophila</i> SG1 (~ 5x10 ⁴ CFU/mL)
536 230523 03	∅	62	<i>Escherichia coli</i> K12
536 230523 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 = 138	Proben Nr. (Sample no.)					Inhibition			
	01	02	03	04		01	02	03	04
Befund <i>Result</i>									
Positiv	135	135	2	128	n.d.	4	4	4	4
Negativ	3	2	134	9	nein <i>no</i>	134	133	133	133
Fraglich <i>Questionable</i>	0	1	2	1	ja <i>yes</i>	0	1	1	1

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		02		04		03	
	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= 3)	3	100	3	100	3	100	3	100
Amplex eazyplex PneumoBug exp.(n= 5)	5	100	5	100	4	80	5	100
AmpliGnost L. pneumophila (n= 4)	4	100	4	100	4	100	4	100
BioGx auf BD Max (n= 2)	2	100	2	100	2	100	2	100
BioFire FILMARRAY PN plus (n= 1)	1	100	1	100	0	0	1	100
ReadyMax Atypical Pneumonia 1 (n= 2)	2	100	2	100	2	100	2	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= 6)	6	100	6	100	6	100	6	100
Gerbion Diarella Legionella (n= 2)	2	100	2	100	1	50	2	100
Ingenetix BactoReal L.pn. (n= 2)	2	100	2	100	1	50	1	50
Luminex Resp. Pathogen Panel (n= 3)	3	100	3	100	3	100	3	100
ampliCube Resp. panel 1.1/1.1LC (n= 7)	6	86	7	100	7	100	7	100
QIAstat-Dx Resp. Sars CoV-2 (n= 2)	2	100	1	50	0	0	2	100
Seegene Allplex Pneumobacter (n= 6)	6	100	6	100	6	100	6	100
Seegene Allplex Resp. Panel 4 (n= 20)	20	100	20	100	19	95	20	100
Tib Molbiol LightMix Legionella (n= 8)	8	100	8	100	7	88	8	100
RIDAGENE CAP Bac (n= 4)	4	100	4	100	4	100	4	100
RIDAGENE Legionella Kit (n= 9)	9	100	9	100	8	89	9	100
<i>In house</i> PCR assay (n= 30)	30	100	30	100	30	100	29 [§]	100
Other commercial tests (n= 12)	10	83	10*	91	11*	100	10*	91

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

* Inhibition

Comments:

- The following tests are listed under "Other commercial tests": MIKROGEN alphaCube Legionella (1x), MIKROGEN ampliCube Resp. panel 1.2 LC (1x), Vitassay qPCR Legionella pneumophila (1x), AnDiatec Quidel L. pneumophila (1x), Luminex Respiratory Pathogen Panel Multiplex (1x), EasyScreen Atypical Respiratory pathogens (1x), Progenie RealCycler LEGI-UX (1x), CerTest VIASURE C. pneumonia, M. pneumonia and L. pneumophila Real Time PCR Detection Kit (1x), AusDiagnostics Pneumonia 16-well (1x), AusDiagnostics HP-Pneumonia (1x) and PathoFinder RespiFinder 2Smart (1x).
- Only Legionella spp. detection was performed by 2 laboratories. All reported results were correct.