

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



Tabelle 1: Probenzusammensetzung und erwartetes Ergebnis.

Sample composition and expected results.

Proben Nr.	Erwartet / expected		Probenzusammensetzung / Sample composition
536 231024 01	Ø	62	<i>Escherichia coli</i> K12
536 231024 02	++	61	<i>Legionella pneumophila</i> SG15 (~ 5x10 ⁴ CFU/mL)
536 231024 03	Ø	62	<i>Legionella bozemanii</i> (~ 5x10 ⁴ CFU/mL)
536 231024 04	++	61	<i>Legionella pneumophila</i> SG1 (~ 5x10 ⁴ CFU/mL)

Tabelle 2: Häufigkeit der Mitteilung verschiedener Befunde.

Absolute numbers of reported individual results.

<i>n</i> = 129	Proben Nr. (Sample no.)					Inhibition			
	01	02	03	04		01	02	03	04
Befund <i>Result</i>									
Positiv	1	125	3	126	n.d.	2	2	2	2
Negativ	128	4	125	3	nein <i>no</i>	127	127	126	127
Fraglich <i>Questionable</i>	0	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>			
	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	6	100	6	100	6	100
ARGENE L. pneumo/Cc R-GENE (n= 2)	2	100	2	100	2	100	2	100
Amplex eazyplex PneumoBug exp. (n= 4)	3	75	3	75	4	100	4	100
AmpliGnost L. pneumophila (n= 4)	4	100	4	100	4	100	4	100
BioGx auf BD Max (n= 1)	1	100	1	100	1	100	1	100
BioFire FILMARRAY PN plus (n= 2)	2	100	2	100	2	100	2	100
ReadyMax Atypical Pneumonia 1 (n= 2)	2	100	2	100	2	100	2	100

ReadyMax b-CAP Assay (n= 1)	1	100	1	100	1	100	1	100
Diagenode R-DiaLeg (n= 1)	1	100	1	100	1	100	1	100
GeneProof L. pneumophila (n= 4)	4	100	4	100	4	100	4	100
Gerbion Diarella Legionella (n= 1)	1	100	1	100	1	100	1	100
Ingenetix BactoReal L.pn. (n= 1)	1	100	1	100	1	100	1	100
Luminex Resp. Pathogen Panel (n= 6)	6	100	6	100	6	100	6	100
ampliCube Resp. panel 1.1/1.1LC (n= 9)	9	100	9	100	9	100	8	89
QIAstat-Dx Resp. Sars CoV-2 (n= 2)	1	50	1	50	1	50	1	50
Seegene Allplex Pneumobacter (n= 8)	8	100	8	100	8	100	8	100
Seegene Allplex Resp. Panel 4 (n= 19)	19	100	19	100	19	100	19	100
Tib Molbiol LightMix Legionella (n= 5)	5	100	5	100	5	100	5	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= 27)	26	96	27	100	27	100	26	96
Other commercial tests (n= 11)	10	91	10	91	11	100	10*§	100

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

* Inhibition

Comments:

1. The following tests are listed under "Other commercial tests": MIKROGEN alphaCube Legionella (1x), MIKROGEN ampliCube Resp. panel 1.2 LC (1x), AnDiatec Quidel L. pneumophila (1x), BioGX M. pneumoniae , Legionella spp, C. pneumoniae- OSR for BD MAX (1x), Luminex NxTAG Respiratory Pathogen Panel + SARS-CoV-2 (1x), EasyScreen Atypical Respiratory pathogens (1x), Progenie RealCycler LEGI-UX (1x), ELITechGroup Respiratory Bacterial ELITe MGB Panel (1x), Bioexsen Bio-Speedy Legionella spp., L. pneumophila RT PCR (1x), AusDiagnostics Pneumonia 16-well (1x), PathoFinder RespiFinder 2Smart (1x).
2. Only Legionella spp. detection was performed by 2 laboratories. With the exception of one laboratory, all reported results were correct.