

**PCR-/NAT *Mycoplasma pneumoniae*
 (RV 541) Mai 2023**



Tabelle 1: Probenzusammensetzung und erwartetes Ergebnis.

Sample composition and expected results.

Proben Nr.	Erwartet / expected		Probenzusammensetzung / Sample composition
541 230523 01	++	61	<i>Mycoplasma pneumoniae</i> (~ 5x10 ⁴ genome copies/mL)
541 230523 02	+	61	<i>Mycoplasma pneumoniae</i> (~ 5x10 ³ genome copies/mL)
541 230523 03	+++	61	<i>Mycoplasma pneumoniae</i> (~ 5x10 ⁵ genome copies/mL)
541 230523 04	∅	62	<i>Escherichia coli</i> K12

Tabelle 2: Häufigkeit der Mitteilung verschiedener Befunde.

Absolute numbers of reported individual results.

n = 154	Proben Nr. (Sample no.)					Inhibition			
	01	02	03	04		01	02	03	04
Befund <i>Result</i>									
Positiv	151	132	153	4	n.d.	3	3	3	3
Negativ	3	19	1	150	nein <i>no</i>	151	151	151	151
Fraglich <i>Questionable</i>	0	3	0	0	ja <i>yes</i>	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 <i>True positive results</i>						NAT richtig negativ	
	01		02		03		04	
	Absolut <i>Absolute</i>	%	Absolut <i>Absolute</i>	%	Absolut <i>Absolute</i>	%	Absolut <i>Absolute</i>	%
AID CAP bacteria (n = 7)	7	100	6	86	7	100	7	100
ARGENE C.pn / M.pn r-gene (n = 6)	5	83	6	100	5	83	5	83
Amplex eazyplex PneumoBug exp. (n=5)	5	100	3	60	5	100	5	100
AmpliGnost M. pneumoniae (n = 5)	5	100	5	100	5	100	5	100
AmpliSens M.pn./C.pn. FRT Kit (n = 1)	1	100	1	100	1	100	1	100
BioGx auf BD Max (n = 7)	7	100	7	100	7	100	7	100
FILMARRAY Resp. Panel 2.1 plus (n = 2)	2	100	2	100	2	100	2	100
Biolegio ReadyMax b-CAP Assay (n = 1)	1	100	1	100	1	100	1	100
FTD Atypical CAP (n = 1)	1	100	1	100	1	100	1	100

FTD Respiratory Pathogens 21 (n = 1)	1	100	1	100	1	100	1	100
GeneProof M. pneumoniae (n = 12)	12	100	11	92	12	100	12	100
Luminex MagPix Resp. Pathogen (n = 1)	1	100	1	100	1	100	1	100
Mikrogen Diagenode M.pn./C.pn. (n = 1)	1	100	1	100	1	100	1	100
ampliCube Resp. panel 1 (n = 2)	2	100	2	100	2	100	2	100
ampliCube Resp. panel 1.1 /1.1LC (n=11)	11	100	9	82	11	100	10	90
Alethia Mycoplasma direct (n = 3)	3	100	3	100	3	100	3	100
Sacace M.pn./C.pn. Real-TM (n = 3)	3	100	2	67	3	100	3	100
Sartorius Microsart ATMP Myc. (n = 1)	1	100	1	100	1	100	0	0
Seegene Allplex Pneumobacter (n = 6)	5	83	5	83	6	100	6	100
Seegene Allplex Resp. Panel 4 (n = 15)	15	100	13[§]	93	15	100	15	100
LightMix M. pneumoniae (n = 11)	11	100	10	91	11	100	11	100
RIDAGENE CAP Bac (n = 5)	5	100	3[§]	75	5	100	5	100
In house PCR assay (n = 32)	32	100	26[§]	84	32	100	32	100
Other commercial tests (n = 15)	14	93	12	80	15	100	14	93

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

Comments:

1. The following tests are listed under "Other commercial tests": PathoFinder RespiFinder 2Smart (1x), AusDiagnostics Pneumonia 16-well (1x), Ingenetix BactoReal M. pneumoniae (1x), Genetic Signatures EasyScreen Respiratory Pathogens Detection kit (1x), Hola Mycoplasma pneumoniae Lyo PCR Kit (1x), Applied Biosystems MycoSEQ Mycoplasma PCR Detection Kit (1x), Luminex NxTAG Respiratory Pathogen Panel + SARS-CoV-2 (2x), Qiagen QiaStat-Dx Respiratory Sars- Cov-2 Panel (2x), Qiagen QiaStat-Dx ME Panel (1x), Qiagen QuantiNova Multiplex PCR Kit (1x), CerTest VIASURE C. pneumonia, M. pneumonia and L. pneumophila Real Time PCR Detection Kit -CML172- (1x) and ELITechGroup Respiratory Bacterial ELITe MGB Panel (1x).