

**PCR-/NAT *Bordetella pertussis*
 (RV 532) Mai 2022**



Tabelle 1: Probenzusammensetzung und erwartetes Ergebnis.

Sample composition and expected results.

	<i>Erwartet / expected</i>		<i>Probenzusammensetzung / Sample composition</i>
2215321	∅	62	<i>Bordetella parapertussis</i> (~ 5x10 ⁴ CFU/mL)
2215322	++	61	<i>Bordetella pertussis</i> (~ 5x10 ⁴ CFU/mL)
2215323	∅	62	<i>Escherichia coli</i> K12
2215324	++	61	<i>Bordetella pertussis</i> (~ 1x10 ⁴ CFU/mL)

Tabelle 2: Häufigkeit der Mitteilung verschiedener Befunde.

Absolute numbers of reported individual results.

<i>n = 171</i>	<i>Probennummer (Sample no.)</i>				<i>Inhibition</i>				
	<i>2215321</i>	<i>2215322</i>	<i>2215323</i>	<i>2215324</i>	<i>2215321</i>	<i>2215322</i>	<i>2215323</i>	<i>2215324</i>	
Befund <i>Result</i>									
Positiv	11	167	1	156	n.d.	2	2	2	2
Negativ	160	4	170	15	nein <i>no</i>	169	169	169	169
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 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 <i>True negative results</i>			
	2215322		2215324		2215321		2215323	
	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	5	83	6	100
ARGENE <i>Bordetella</i> R-GENE (n = 2)	2	100	2	100	2	100	2	100
Altona diag. RealStar <i>Bordetella</i> (n = 3)	3	100	3	100	2	67	3	100
AmpliGnost <i>B.pert.</i> / <i>B.parapert.</i> (n = 2)	2	100	2	100	2	100	2	100
Bio-Evolution <i>B. pert.</i> / <i>B. parapert.</i> (n = 2)	2	100	2	100	2	100	2	100
FILMARRAY Resp. Panel 2.1 plus (n = 2)	2	100	2	100	2	100	2	100
BioGX <i>Bordetella</i> speciation toxin (n = 3)	3	100	3	100	3	100	3	100

HAIN FluoroType Bordetella (n = 8)	8	100	8	100	7	88	8	100
DiaSorin Simplexa Bordetella Direct (n = 5)	5	100	5	100	5	100	5	100
Diagenode B. pert. / B. parapert. (n = 2)	2	100	2	100	1	50	2	100
FTD Bordetella (n = 1)	1	100	1	100	1	100	1	100
GeneProof B. pert. / B. parapert. (n = 10)	10	100	8	80	7	70	10	100
HOLOGIC Panther Bordetella (n=4)	4	100	4	100	4	100	4	100
Ingenetix BactoReal B. pertussis (n = 2)	2	100	2	100	2	100	2	100
ampliCube Resp. panel 2 (n = 14)	14	100	14	100	13	93	13	93
Meridian Alethia Pertussis (n = 3)	3	100	3	100	3	100	3	100
Solana Bordetella complete assay (n = 4)	4	100	4	100	4	100	4	100
Seegene Allplex Resp. Panel 4 (n = 13)	12	92	8	62	13	100	13	100
LightMix B. pert. (n = 8)	8	100	8	100	7	88	8	100
RIDAGENE Bordetella (n = 20)	19	95	17	85	19	95	20	100
In house PCR assay [28] (n =41)	40	98	39	95	41	100	41	100
Other commercial tests (n = 16)	15	94	13	81	15	94	16	100

Comments:

1. Unter "Andere kommerzielle Testsysteme" sind folgende Testsysteme aufgeführt: Seegene Allplex Pneumobacter Assay (1x), AmpliSens Bordetella multi FRT PCR kit (1x), AusDiagnostics (1x), PathoFinder RespiFinder 2Smart (1x), Luminex ARIES Bordetella Assay (1x), Attomol Bordetella Realtime LT (1x), Sacace Biotechnologies Bordetella Real TM (1x), Roche Diagnostics (1x), VIASURE Bordetella Real Time PCR Detection Kit (1x), PerfeCTaq PCR Tough Mix (1x), ELITechGroup Bordetella ELITE MGB Kit (1x), Gerbion Diarella Bordetella (1x) und Nuclear Laser (1x).