

PCR-/NAT *Bordetella pertussis* (RV 532) Mai 2025



Tabelle 1: Probenzusammensetzung und erwartetes Ergebnis.

Sample composition and expected results.

Proben Nr.	Erwartet / expected		Probenzusammensetzung / Sample composition
532A 250520 01	++	61	<i>Bordetella pertussis</i> (~ 5x10 ⁴ CFU/mL)
532A 250520 02	Ø	62	<i>Bordetella parapertussis</i> (~ 1x10 ⁴ CFU/mL)
532A 250520 03	Ø	62	<i>Bordetella parapertussis</i> (~ 1x10 ⁵ CFU/mL)
532A 250520 04	+++	61	<i>Bordetella pertussis</i> (~ 1x10 ⁵ CFU/mL)

Tabelle 2: Häufigkeit der Mitteilung verschiedener Befunde.

Absolute numbers of reported individual results.

<i>n</i> = 182		Proben Nr. (Sample no.)				Inhibition				
Befund Result		01	02	03	04		01	02	03	04
Positiv	169	5	6	179		n.d.	2	2	2	2
Negativ	13	177	176	3		nein no	180	180	180	180
Fraglich Questionable	0	0	0	0		ja yes	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 True positive results				NAT richtig negativ True negative results			
	01		04		02		03	
	Absolut Absolute	%	Absolut Absolute	%	Absolut Absolute	%	Absolut Absolute	%
AID CAP Bacteria (n = 4)	4	100	4	100	4	100	4	100
ARGENE Bordetella R-GENE (n = 2)	2	100	2	100	2	100	2	100
Altona diag. RealStar Bordetella (n = 4)	4	100	4	100	4	100	4	100
AmpliGnost B.pert. / B.parapert. (n = 2)	2	100	2	100	2	100	2	100
AusDiagnostics Resp. Pathogens 24-well (n = 1)	1	100	1	100	1	100	1	100
Bio-Evolution B. pert. / B. parapert. (n = 2)	2	100	2	100	2	100	2	100
BioGX Bordet. Speciation plus toxin (n = 6)	6	100	5	83	6	100	6	100
FILMARRAY Resp. Panel 2.1 plus (n = 4)	4	100	4	100	4	100	4	100

CerTest VIASURE Bordetella RT PCR (n = 1)	1	100	1	100	1	100	1	100
DiaSorin Simplexa Bordetella Direct (n = 10)	10	100	10	100	10	100	10	100
GeneProof B. pert. / B. parapert. (n = 9)	7	78	9	100	8	89	8	89
EasyScreen Pertussis & PCP Kit (n = 1)	1	100	1	100	1	100	1	100
HOLOGIC Panther Bordetella (n = 8)	8	100	8	100	7	88	6	75
Ingenetix BactoReal B. pertussis (n = 1)	1	100	1	100	1	100	1	100
MIKROGEN ampliCube Resp. panel 2 (n = 16)	15	94	16	100	16	100	16	100
Meridian Alethia Pertussis (n = 2)	2	100	2	100	2	100	2	100
QIAstat-Dx Respiratory Sars CoV-2 panel (n= 1)	1	100	1	100	1	100	1	100
Solana Bordetella complete assay (n = 2)	2	100	2	100	2	100	2	100
Seegene Allplex Pneumobacter (n = 10)	10	100	10	100	10	100	10	100
Seegene Allplex Resp. Panel 4 (n = 24)	17	71	23	96	23	96	23	96
TIB Molbiol LightMix B. pert. (n = 9)	8	89	8	89	8	89	8	89
r-Biopharm RIDAGENE Bordetella (n = 22)	22	100	22	100	22	100	22	100
In house PCR assay [28] (n = 20)	19	95	20	100	20	100	20	100
Other commercial tests (n = 21)	20	95	21	100	20	95	20	95

Comments:

1. The following tests are listed under "Other commercial tests": Altona diagnostics FlexStar Bordetella PCR Detection Mix (4x), Roche UC-TIB-Respi-BAC-1 (4x), Sacace Biotechnologies B.pertussis /B.parapertussis /B.bronchiseptica Real TM (2x), AB Analytica RQ ResP-BORD (1x), Anatolia Geneworks Bosphore B. pertussis /parapertussis Genotyping Kit (1x), BioGX Bordetella pertussis /parapertussis (1x), Gerbion Diarella Bordetella (1x), ELITechGroup Bordetella ELITe MGB Kit (1x), Progenie RealCycler BORD (1x) and Eurobio EurobioPlex Bordetella triplex (1x).