

PCR-/NAT *Bordetella pertussis*
(RV 532) Mai 2015



Tabelle 1: Probenzusammensetzung und erwartetes Ergebnis.

Sample composition and expected results.

	<i>Erwartet / expected</i>		<i>Probenzusammensetzung / Sample composition</i>
1515321	+++	61	<i>Bordetella pertussis</i> (~ 1x10 ⁵ CFU/mL)
1515322	+	61	<i>Bordetella pertussis</i> (~ 1x10 ³ CFU/mL)
1515323	++	61	<i>Bordetella pertussis</i> (~ 1x10 ⁴ CFU/mL)
1515324	∅	62	<i>Escherichia coli</i> K12

Tabelle 2: Häufigkeit der Mitteilung verschiedener Befunde.

Absolute numbers of reported individual results.

<i>n = 152</i>	<i>Probennummer (Sample no.)</i>				<i>Inhibition</i>				
	1515321	1515322	1515323	1515324	1515321	1515322	1515323	1515324	
Befund <i>Result</i>									
Positiv	152	126 ¹⁾	145	2	n.d.	2	2	2	2
Negativ	0	26 ¹⁾	7	150	nein <i>no</i>	150	150	150	150
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 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>		
	Absolut <i>Absolute</i>	Relativ <i>Relative</i>	%	Absolut <i>Absolute</i>	Relativ <i>Relative</i>	%
TIB Molbiol LightMix BP [20] (n = 13)	37	37 / 39	95	13	13 / 13	100
Diagenode <i>B.pertussis</i> [21] (n = 9)	25	25 / 27	93	8	8 / 9	89
GenoQuick <i>Bordetella</i> [22] (n = 14)	41	41 / 42	98	13	13 / 14	93
RIDAGENE <i>Bordetella</i> [23] (n = 15)	45	45 / 45	100	15	15 / 15	100
Other commercial tests [27] (n = 43)	114	114 / 129	88	43	43 / 43	100
<i>In house</i> PCR assay [28] (n = 58)	159	159 / 174	91	58	58 / 58	100
Andere / k.A. / <i>other</i> [29] (n = 2)	6	6 / 6	100	2	2 / 2	100

* Durch Mehrfachnennung oder fehlende Angabe kann die absolute Zahl der Ergebnisse (Tab. 2) von der Anzahl der Teilnehmer abweichen.
Due to reporting results of multiple assay systems or missing specifications, the effective numbers are not correlating with the number of participants

Comments: ¹⁾ As sample #1515322 contained a low number of *Bordetella pertussis* target organisms, negative PCR results were not rated "false negative", but the participants may consider to improve the analytical sensitivity of corresponding PCR assays.