

**PCR-/NAT *Bordetella pertussis***  
**(RV 532) Mai / Juni 2018**



**Tabelle 1: Probenzusammensetzung und erwartetes Ergebnis.**

*Sample composition and expected results.*

	<i>Erwartet / expected</i>		<i>Probenzusammensetzung / Sample composition</i>
1815321	++++	61	<i>Bordetella pertussis</i> (~ 1x10 <sup>6</sup> CFU/mL)
1815322	∅	62	<i>Bordetella parapertussis</i> (~ 1x10 <sup>5</sup> CFU/mL)
1815323	∅	62	<i>Escherichia coli</i> K12
1815324	++	61	<i>Bordetella pertussis</i> (~ 1x10 <sup>4</sup> CFU/mL)

**Tabelle 2: Häufigkeit der Mitteilung verschiedener Befunde.**

*Absolute numbers of reported individual results.*

<i>n = 167</i>	<i>Probennummer (Sample no.)</i>				<i>Inhibition</i>				
	<b>1815321</b>	<b>1815322</b>	<b>1815323</b>	<b>1815324</b>	<b>1815321</b>	<b>1815322</b>	<b>1815323</b>	<b>1815324</b>	
<b>Befund</b> <i>Result</i>									
<b>Positiv</b>	167	9	1	127	n.d.	1	1	1	1
<b>Negativ</b>	0	158	166	38 <sup>1)</sup>	nein <i>no</i>	166	166	166	166
<b>Fraglich</b> <i>Questionable</i>	0	0	0	2	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.*

<b>NAT-Methode</b> [Code] (total number *)	<b>NAT richtig positiv</b> <i>True positive results</i>			<b>NAT richtig negativ</b> <i>True negative results</i>		
	<b>Absolut</b> <i>Absolute</i>	<b>Relativ</b> <i>Relative</i>	<b>%</b>	<b>Absolut</b> <i>Absolute</i>	<b>Relativ</b> <i>Relative</i>	<b>%</b>
TIB Molbiol LightMix BP [20] (n = 10)	20	20 / 20	100	20	20 / 20	100
Diagenode <i>B.pertussis</i> [21] (n = 8)	14	14 / 16	88	16	16 / 16	100
GeneProof <i>Bordetella</i> [22] (n = 11)	14	14 / 21 §	67	17	17 / 22	77
r-Biopharm RIDAGENE [23] (n = 20)	35	35 / 39 §	90	40	40 / 40	100
AID CAP Bacteria [24] (n = 4)	8	8 / 8	100	8	8 / 8	100
Other commercial tests [27] (n = 59)	106	106 / 118	90	114	114 / 118	97
<i>In house</i> PCR assay [28] (n = 52)	92	92 / 104	88	103	103 / 104	99
Andere / k.A. / other [29] (n = 5)	9	9 / 10	90	10	10 / 10	100

§ Due to reporting questionable results, the number of true results (denominator in the „relative“ column) has been reduced.

\* 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:** <sup>1)</sup> As sample #1815324 contained a low number of *Bordetella pertussis* target organisms, negative PCR results were not rated “false negative” in this EQAS distribution.