

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



Tabelle 1: Probenzusammensetzung und erwartetes Ergebnis.

Sample composition and expected results.

	<i>Erwartet / expected</i>		<i>Probenzusammensetzung / Sample composition</i>
1825321	Ø	62	<i>Escherichia coli</i> K12
1825322	++	61	<i>Bordetella pertussis</i> (~ 5x10 ⁴ CFU/mL)
1825323	Ø	62	<i>Bordetella parapertussis</i> (~ 1x10 ⁵ CFU/mL)
1825324	Ø	62	<i>Bordetella holmesii</i> (~ 1x10 ⁴ CFU/mL)

Tabelle 2: Häufigkeit der Mitteilung verschiedener Befunde.

Absolute numbers of reported individual results.

<i>n = 146</i>	<i>Probennummer (Sample no.)</i>				<i>Inhibition</i>				
	<i>1825321</i>	<i>1825322</i>	<i>1825323</i>	<i>1825324</i>	<i>1825321</i>	<i>1825322</i>	<i>1825323</i>	<i>1825324</i>	
Befund <i>Result</i>									
Positiv	2	143	4	89 ¹⁾	n.d.	2	2	2	2
Negativ	144	2	142	52	nein <i>no</i>	144	144	144	144
Fraglich <i>Questionable</i>	0	1	0	5	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

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 = 10)	10	10 / 10	100	21	21 / 30	70
Diagenode <i>B.pertussis</i> [21] (n = 8)	8	8 / 8	100	18	18 / 24	75
GeneProof <i>Bordetella</i> [22] (n = 7)	7	7 / 7	100	21	21 / 21	100
r-Biopharm RIDAGENE [23] (n = 21)	19	19 / 20 [§]	95	57	57 / 60 [§]	95
AID CAP Bacteria [24] (n = 3)	3	3 / 3	100	6	6 / 9	67
Other commercial tests [27] (n = 52)	51	51 / 52	98	113	113 / 154 [§]	73
<i>In house</i> PCR assay [28] (n = 46)	46	46 / 46	100	107	107 / 138	78
Andere / k.A. / other [29] (n = 3)	3	3 / 3	100	6	6 / 9	67

[§] 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.

Comments: ¹⁾ Due to the well-known cross-reaction of *B. holmesii* in IS 481-specific PCR assays for *B. pertussis*, positive PCR results with sample #1825324 were not rated as false-positive.