

**PCR-/NAT *Bordetella pertussis*
 (RV 532) November 2012**



Tabelle 1: Probenzusammensetzung und erwartetes Ergebnis.
Sample composition and expected results.

| | <i>Erwartet / expected</i> | | <i>Probenzusammensetzung / Sample composition</i> |
|---------|----------------------------|----|--|
| 1225321 | +++ | 61 | <i>Bordetella pertussis</i> (~ 1x10 ⁵ CFU/mL) |
| 1225322 | ∅ | 62 | <i>Bordetella parapertussis</i> (~ 1x10 ⁴ CFU/mL) |
| 1225323 | ∅ | 62 | <i>Escherichia coli</i> K12 |
| 1225324 | + | 61 | <i>Bordetella pertussis</i> (~ 1x10 ³ CFU/mL) |

Tabelle 2: Häufigkeit der Mitteilung verschiedener Befunde.
Absolute numbers of reported individual results.

| <i>n = 106</i> | <i>Probennummer (Sample no.)</i> | | | | | <i>Inhibition</i> | | | |
|--|----------------------------------|----------------|----------------|------------------|-------------------|-------------------|----------------|----------------|----------------|
| | <i>1225321</i> | <i>1225322</i> | <i>1225323</i> | <i>1225324</i> | | <i>1225321</i> | <i>1225322</i> | <i>1225323</i> | <i>1225324</i> |
| Befund <i>Result</i> | | | | | | | | | |
| Positiv | 106 | 1 | 0 | 92 | n.d. | 2 | 2 | 2 | 2 |
| Negativ | 0 | 105 | 106 | 11 ¹⁾ | nein <i>no</i> | 104 | 104 | 104 | 104 |
| Fraglich <i>Questionable</i> | 0 | 0 | 0 | 3 | 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> | | |
|---|--|-----------------------------------|------------|--|-----------------------------------|------------|
| | Absolut <i>Absolute</i> | Relativ <i>Relative</i> | % | Absolut <i>Absolute</i> | Relativ <i>Relative</i> | % |
| Other commercial tests [27] (n = 45) | 88 | 88 / 90 | 98 | 90 | 90 / 90 | 100 |
| In house PCR assay [28] (n = 57) | 102 | 102/111 [§] | 92 | 113 | 113 / 114 | 99 |
| Andere / k.A. / other [29] (n = 4) | 8 | 8 / 8 | 100 | 8 | 8 / 8 | 100 |

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

Comments: ¹⁾ As sample #1225324 contained a very low number of *Bordetella pertussis* target organisms, negative PCR results were not rated as “false negative”, but the participants may consider to improve the analytical sensitivity of their corresponding PCR assays.