

**PCR-/NAT *Listeria* spp.
 (RV 538) Mai 2014**



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

| | <i>Erwartet / expected</i> | | <i>Probenzusammensetzung / Sample composition</i> |
|---------|----------------------------|--------|--|
| 1415381 | + | 61 /71 | <i>Listeria monocytogenes</i> (~ 1x10 ⁴ CFU/mL) |
| 1415382 | ∅ | 62 | <i>Escherichia coli</i> K12 |
| 1415383 | ++ | 61 /74 | <i>Listeria innocua</i> (~ 1x10 ⁵ CFU/mL) |
| 1415384 | ++ | 61 /71 | <i>Listeria monocytogenes</i> (~ 1x10 ⁵ CFU/mL) |

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

| <i>n</i> = 36 | Probennummer (Sample no.) | | | | Inhibition | | | | |
|--|---------------------------|---------|------------------|---------|-------------------|---------|---------|---------|----|
| | 1415381 | 1415382 | 1415383 | 1415384 | 1415381 | 1415382 | 1415383 | 1415384 | |
| Befund <i>Result</i> | | | | | | | | | |
| Positiv | 36 | 0 | 1 | 36 | n.d. | 0 | 0 | 0 | 0 |
| Negativ | 0 | 36 | 34 ¹⁾ | 0 | nein <i>no</i> | 36 | 36 | 36 | 36 |
| Fraglich <i>Questionable</i> | 0 | 0 | 1 | 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 LM [21] (n = 1) | 2 | 2 / 3 | 67 | 1 | 1 / 1 | 100 |
| Ingenetix BactoReal LM [22] (n = 3) | 6 | 6 / 9 | 67 | 3 | 3 / 3 | 100 |
| Other commercial tests [27] (n = 8) | 16 | 16 / 23 [§] | 70 | 8 | 8 / 8 | 100 |
| <i>In house</i> PCR assay [28] (n = 24) | 49 | 49 / 72 | 68 | 24 | 24 / 24 | 100 |

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

Comments: ¹⁾ Due to the predominant use of *L. monocytogenes*-specific PCR assays, negative PCR results with sample # 1415383 were not rated as “false negative”.