

PCR-/NAT *Listeria spp.*
(RV 538) Mai 2023



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

| Proben Nr. | Erwartet / expected | | Probenzusammensetzung / Sample composition |
|---------------|---------------------|---------------|------------------------------------------------------------|
| 538 230523 01 | + | 61 /71 | <i>Listeria monocytogenes</i> (~ 5x10 ³ CFU/mL) |
| 538 230523 02 | ++ | 61 /71 | <i>Listeria monocytogenes</i> (~ 5x10 ⁴ CFU/mL) |
| 538 230523 03 | +++ | 61 /71 | <i>Listeria monocytogenes</i> (~ 5x10 ⁵ CFU/mL) |
| 538 230523 04 | ∅ | 62 | <i>Escherichia coli</i> K12 |

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

| <i>n</i> = 51 | Proben Nr. (Sample no.) | | | | | Inhibition | | | |
|----------------------------------------|-------------------------|-----------|-----------|-----------|-------------------|------------|-----------|-----------|-----------|
| | 01 | 02 | 03 | 04 | | 01 | 02 | 03 | 04 |
| Befund <i>Result</i> | | | | | | | | | |
| Positiv | 50 | 51 | 51 | 0 | n.d. | 0 | 0 | 0 | 0 |
| Negativ | 1 | 0 | 0 | 51 | nein <i>no</i> | 51 | 51 | 51 | 51 |
| 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 | |
|------------------------------------------------|-----------------------------------------------------|------------|----------------------------|------------|----------------------------|------------|----------------------------|------------|
| | 01 | | 02 | | 03 | | 04 | |
| | Absolut <i>Absolute</i> | % | Absolut <i>Absolute</i> | % | Absolut <i>Absolute</i> | % | Absolut <i>Absolute</i> | % |
| Amplex eazyplex CSF direct (n = 5) | 5 | 100 | 5 | 100 | 5 | 100 | 5 | 100 |
| AmpliGnost <i>L. monocytogenes</i> (n = 1) | 1 | 100 | 1 | 100 | 1 | 100 | 1 | 100 |
| BioGX Bacterial Meningitis ELGBS (n=2) | 2 | 100 | 2 | 100 | 2 | 100 | 2 | 100 |
| BioFire FILMARRAY ME Panel (n = 2) | 2 | 100 | 2 | 100 | 2 | 100 | 2 | 100 |
| Ingenetix BactoReal <i>L. monocyt.</i> (n = 2) | 2 | 100 | 2 | 100 | 2 | 100 | 2 | 100 |
| Progenie RealCycler <i>L. monocyt.</i> (n = 5) | 4 | 80 | 5 | 100 | 5 | 100 | 5 | 100 |
| Sacace <i>L. monocyt.</i> Real-TM (n = 2) | 2 | 100 | 2 | 100 | 2 | 100 | 2 | 100 |
| Seegene Allplex Meningitis-B (n = 6) | 6 | 100 | 6 | 100 | 6 | 100 | 6 | 100 |

| | | | | | | | | |
|-------------------------------------------|-----------|------------|-----------|------------|-----------|------------|-----------|------------|
| LightMix L. monocytogenes (n = 4) | 4 | 100 | 4 | 100 | 4 | 100 | 4 | 100 |
| <i>In house</i> PCR assay (n = 17) | 17 | 100 | 17 | 100 | 17 | 100 | 17 | 100 |
| Other commercial tests (n = 5) | 5 | 100 | 5 | 100 | 5 | 100 | 5 | 100 |

Comments:

1. The following tests are listed under "Other commercial tests": Bioteccon Diagnostics Foodproof Listeria monocytogenes Detection Kit (1x), Qiagen QiaStat-Dx ME Panel (1x), CerTest VIASURE S. agalactiae, L. monocytogenes & E.coli Real Time PCR Detection Kit (1x) and AmpliSens L. monocytogenes PCR kit (1x).