

## PCR-/NAT *F. tularensis* & *Brucella* (RV 543) Mai 2026



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

*Sample composition and expected results.*

| Proben Nr.    | Erwartet / expected | Probenzusammensetzung / Sample composition                                                                                         |
|---------------|---------------------|------------------------------------------------------------------------------------------------------------------------------------|
| 543 260519 01 | Ø / ++              | <i>Brucella melitensis</i> (~ 5x10 <sup>4</sup> CFU/mL)                                                                            |
| 543 260519 02 | ++ / ++             | <i>Franc. tularensis subsp. tularensis</i> (~ 2x10 <sup>4</sup> CFU/mL)<br><i>Brucella melitensis</i> (~ 5x10 <sup>4</sup> CFU/mL) |
| 543 260519 03 | ++ / Ø              | <i>Franc. tularensis subsp. tularensis</i> (~ 5x10 <sup>4</sup> CFU/mL)                                                            |
| 543 260519 04 | Ø / Ø               | <i>Escherichia coli</i> K12                                                                                                        |

**Tabelle 2: Häufigkeit der Mitteilung verschiedener Befunde. Anmerkung: in dieser Tabelle sind nur die Ergebnisse für *Francisella tularensis* dargestellt.**

*Absolute numbers of reported individual results.*

**Note:** only the *F. tularensis*-specific results are depicted in this table.

| <i>n</i> = 34            | Proben Nr. (Sample no.) |    |    |    | Inhibition |    |    |    |    |
|--------------------------|-------------------------|----|----|----|------------|----|----|----|----|
| Befund<br>Result         | 01                      | 02 | 03 | 04 |            | 01 | 02 | 03 | 04 |
| Positiv                  | 1                       | 32 | 34 | 0  | n.d.       | 0  | 0  | 0  | 0  |
| Negativ                  | 33                      | 1  | 0  | 34 | nein<br>no | 34 | 34 | 34 | 34 |
| Fraglich<br>Questionable | 0                       | 1  | 0  | 0  | ja<br>yes  | 0  | 0  | 0  | 0  |

**Tabelle 3: Häufigkeit richtig positiver und richtig negativer NAT-Befunde bei Anwendern verschiedener Methoden. Anmerkung: in dieser Tabelle sind nur die Ergebnisse für *Francisella tularensis* dargestellt.**

*Absolute numbers and relative frequency of reported true positive and true negative results among various NAT methods. Note: only the *F. tularensis*-specific results depicted.*

| NAT-Methode<br>[Code] (total number)              | NAT richtig positiv<br>True positive results |     |                     |     | NAT richtig negativ<br>True negative results |     |                     |     |
|---------------------------------------------------|----------------------------------------------|-----|---------------------|-----|----------------------------------------------|-----|---------------------|-----|
|                                                   | 02                                           |     | 03                  |     | 01                                           |     | 04                  |     |
|                                                   | Absolut<br>Absolute                          | %   | Absolut<br>Absolute | %   | Absolut<br>Absolute                          | %   | Absolut<br>Absolute | %   |
| BioFire FILMARRAY BioThreat Panel (n = 3)         | 3                                            | 100 | 3                   | 100 | 3                                            | 100 | 3                   | 100 |
| TIB Molbiol LightMix <i>F. tularensis</i> (n = 4) | 4                                            | 100 | 4                   | 100 | 4                                            | 100 | 4                   | 100 |
| In house PCR assay (n = 26)                       | 24 <sup>§</sup>                              | 96  | 26                  | 100 | 25                                           | 96  | 26                  | 100 |
| Other commercial tests (n = 1)                    | 1                                            | 100 | 1                   | 100 | 1                                            | 100 | 1                   | 100 |

<sup>§</sup> Fraglich Due to reporting questionable results, the number of true results has been reduced.

**Comments:**

The following tests are listed under "Other commercial tests": Genesig Real-time PCR detection kit for *Francisella tularensis* (1x).

**Tabelle 4: Häufigkeit der Mitteilung verschiedener Befunde. Anmerkung: in dieser Tabelle sind nur die Ergebnisse für *Brucella* dargestellt.**

*Absolute numbers of reported individual results.*

**Note:** only the *Brucella*-specific results are depicted in this table.

| <i>n</i> = 39            | Proben Nr. (Sample no.) |    |    |    | Inhibition |    |    |    |
|--------------------------|-------------------------|----|----|----|------------|----|----|----|
| Befund<br>Result         | 01                      | 02 | 03 | 04 | 01         | 02 | 03 | 04 |
| Positiv                  | 39                      | 39 | 0  | 0  | n.d.       | 1  | 1  | 1  |
| Negativ                  | 0                       | 0  | 39 | 39 | nein<br>no | 38 | 38 | 38 |
| Fraglich<br>Questionable | 0                       | 0  | 0  | 0  | ja<br>yes  | 0  | 0  | 0  |

**Tabelle 5: Häufigkeit richtig positiver und richtig negativer NAT-Befunde bei Anwenden verschiedener Methoden. Anmerkung: in dieser Tabelle sind nur die Ergebnisse für *Brucella* dargestellt.**

*Absolute numbers and relative frequency of reported true positive and true negative results among various NAT methods.*

**Note:** only the *Brucella*-specific results are depicted in this table.

| NAT-Methode<br>[Code] (total number *)      | NAT richtig positiv<br>True positive results |     |                     |     | NAT richtig negativ<br>True negative results |     |                     |     |
|---------------------------------------------|----------------------------------------------|-----|---------------------|-----|----------------------------------------------|-----|---------------------|-----|
|                                             | 01                                           |     | 02                  |     | 03                                           |     | 04                  |     |
|                                             | Absolut<br>Absolute                          | %   | Absolut<br>Absolute | %   | Absolut<br>Absolute                          | %   | Absolut<br>Absolute | %   |
| Applied Biosystems Brucella (n = 1)         | 1                                            | 100 | 1                   | 100 | 1                                            | 100 | 1                   | 100 |
| BioFire FILMARRAY BioThreat Panel (n = 3)   | 3                                            | 100 | 3                   | 100 | 3                                            | 100 | 3                   | 100 |
| Sacace Brucella Real-TM (n = 3)             | 3                                            | 100 | 3                   | 100 | 3                                            | 100 | 3                   | 100 |
| TIB Molbiol LightMix Brucella Genus (n = 1) | 1                                            | 100 | 1                   | 100 | 1                                            | 100 | 1                   | 100 |
| In house PCR assay (n = 31)                 | 31                                           | 100 | 31                  | 100 | 31                                           | 100 | 31                  | 100 |