# PCR-/NAT *C. burnetii* & *B. anthracis* (RV 542) Mai 2026

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

| Proben Nr. | Erwartet / *expected* | Probenzusammensetzung / *Sample composition* |
|---|---|---|
| 542 260519 01 | ++ / ++ | *Coxiella burnetii* (~ $5x10^4$ genome copies/mL)<br>*B. anthracis* UR-1 Stamm (~ $5x10^4$ genome copies/mL) |
| 542 260519 02 | ∅ / +++ | *B. anthracis* UR-1 Stamm (~ $1x10^5$ genome copies/mL) |
| 542 260519 03 | ∅ / ∅ | *Escherichia coli* K12 |
| 542 260519 04 | ++ / ∅ | *Coxiella burnetii* (~ $2x10^4$ genome copies/mL) |

**Tabelle 2: Häufigkeit der Mitteilung verschiedener Befunde. Anmerkung: in dieser Tabelle sind nur die Ergebnisse für *Coxiella burnetii* dargestellt.**
*Absolute numbers of reported individual results.*
***Note**: only the **C. burnetii**-specific results are depicted in this table.*

| *n = 57* | Proben Nr. *(Sample no.)* | | | |
|---|---|---|---|---|
| **Befund** *Result* | **01** | **02** | **03** | **04** |
| **Positiv** | **57** | **1** | **0** | **56** |
| **Negativ** | **0** | **56** | **57** | **1** |
| **Fraglich** *Questionable* | **0** | **0** | **0** | **0** |

| | Inhibition | | | |
|---|---|---|---|---|
| | **01** | **02** | **03** | **04** |
| **n.d.** | **0** | **0** | **0** | **0** |
| **nein** *no* | **57** | **57** | **57** | **57** |
| **ja** *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 *Coxiella burnetii* dargestellt.**
*Absolute numbers and relative frequency of reported true positive and true negative results among various NAT methods.*
***Note:** only the **C. burnetii**-specific results are depicted in this table.*

| **NAT-Methode** [Code] (total number) | **NAT richtig positiv** *True positive results* | | | | **NAT richtig negativ** *True negative results* | | | |
|---|---|---|---|---|---|---|---|---|
| | **01** | | **04** | | **02** | | **03** | |
| | **Absolut** *Absolute* | **%** | **Absolut** *Absolute* | **%** | **Absolut** *Absolute* | **%** | **Absolut** *Absolute* | **%** |
| **BioFire FILMARRAY BioThreat Panel (n = 3)** | **3** | **100** | **3** | **100** | **3** | **100** | **3** | **100** |
| **Eurobio EurobioPlex Coxiella (n = 1)** | **1** | **100** | **1** | **100** | **1** | **100** | **1** | **100** |
| **MIKROGEN alphaCube Q-Feber (n = 3)** | **3** | **100** | **3** | **100** | **3** | **100** | **3** | **100** |
| **Progenie RealCycler C. burnetii (n = 5)** | **5** | **100** | **5** | **100** | **5** | **100** | **5** | **100** |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Sacace C. burnetii Real-TM (n = 1)** | **1** | **100** | **1** | **100** | **1** | **100** | **1** | **100** |
| ***In house* PCR assay (n = 40)** | **40** | **100** | **39** | **98** | **39** | **98** | **40** | **100** |
| **Other commercial tests (n = 4)** | **4** | **100** | **4** | **100** | **4** | **100** | **4** | **100** |

**Comments:**

1. The following tests are listed under "Other commercial tests": CerTest VIASURE Tick Borne Diseases Real Time PCR Detection Kit (3x) and Innovative Diagnostics ID Gene™ Q Fever Triplex (1x).

**Tabelle 4: Häufigkeit der Mitteilung verschiedener Befunde. Anmerkung: in dieser Tabelle sind nur die Ergebnisse für *Bacillus anthracis* dargestellt.**
*Absolute numbers of reported individual results.*
***Note**: only the **B. anthracis**-specific results are depicted in this table.*

| ***n = 26*** | **Proben Nr.** *(Sample no.)* | | | |
|---|---|---|---|---|
| **Befund** *Result* | **01** | **02** | **03** | **04** |
| **Positiv** | **26** | **25** | **0** | **1** |
| **Negativ** | **0** | **1** | **26** | **25** |
| **Fraglich** *Questionable* | **0** | **0** | **0** | **0** |

| | **Inhibition** | | | |
|---|---|---|---|---|
| | **01** | **02** | **03** | **04** |
| **n.d.** | **0** | **0** | **0** | **0** |
| **nein** *no* | **26** | **26** | **26** | **26** |
| **ja** *yes* | **0** | **0** | **0** | **0** |

**Tabelle 5: Häufigkeit richtig positiver und richtig negativer NAT-Befunde bei Anwendern verschiedener Methoden. Anmerkung: in dieser Tabelle sind nur die Ergebnisse für *Bacillus anthracis* dargestellt.**
*Absolute numbers and relative frequency of reported true positive and true negative results among various NAT methods.*
***Note:** only the **B. anthracis**-specific results are depicted in this table.*

| **NAT-Methode** [Code] (total number) | **NAT richtig positiv** *True positive results* | | | | **NAT richtig negativ** *True negative results* | | | |
|---|---|---|---|---|---|---|---|---|
| | **01** | | **02** | | **03** | | **04** | |
| | **Absolut** *Absolute* | **%** | **Absolut** *Absolute* | **%** | **Absolut** *Absolute* | **%** | **Absolut** *Absolute* | **%** |
| **Altona RealStar Anthrax (n = 4)** | **4** | **100** | **4** | **100** | **4** | **100** | **4** | **100** |
| **BioFire FILMARRAY BioThreat Panel (n = 3)** | **3** | **100** | **3** | **100** | **3** | **100** | **3** | **100** |
| **TIB Molbiol LightMix B. anthracis (n = 2)** | **2** | **100** | **2** | **100** | **2** | **100** | **2** | **100** |
| ***In house* PCR assay (n = 15)** | **15** | **100** | **14** | **93** | **15** | **100** | **14** | **93** |
| **Other commercial tests (n = 2)** | **2** | **100** | **2** | **100** | **2** | **100** | **2** | **100** |

**Comments:**

1. The following tests are listed under "Other commercial tests": Primerdesign / Novacyt B. anthracis genesig kit (1x) and Sacace Biotechnologies Bacillus anthracis Real-TM (1x).