

**PCR-/NAT *C. burnetii* & *B. anthracis*
 (RV 542) Mai 2024**



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

Proben Nr.	Erwartet / expected	Probenzusammensetzung / Sample composition
542A 240521 01	+ / ++	<i>Coxiella burnetii</i> (~ 5x10 ³ genome copies/mL) <i>B. anthracis</i> UR-1 Stamm (~ 5x10 ⁴ genome copies/mL)
542A 240521 02	∅ / ++	<i>B. anthracis</i> UR-1 Stamm (~ 5x10 ⁴ genome copies/mL)
542A 240521 03	∅ / ∅	<i>Escherichia coli</i> K12
542A 240521 04	++ / ∅	<i>Coxiella burnetii</i> (~ 5x10 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*

<i>n</i> = 56	Proben Nr. (Sample no.)					Inhibition			
	01	02	03	04		01	02	03	04
Befund <i>Result</i>									
Positiv	53	0	1	55	n.d.	0	0	0	0
Negativ	2	56	55	1	nein <i>no</i>	56	56	56	56
Fraglich <i>Questionable</i>	1	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. 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 <i>True positive results</i>				NAT richtig negativ <i>True negative results</i>			
	01		04		02		03	
	Absolut <i>Absolute</i>	%	Absolut <i>Absolute</i>	%	Absolut <i>Absolute</i>	%	Absolut <i>Absolute</i>	%
FILMARRAY BioThreat Panel (n = 3)	3	100	3	100	3	100	3	100
MIKROGEN alphaCube Q-Feber (n = 4)	3[§]	100	4	100	4	100	4	100
Progenie RealCycler <i>C. burnetii</i> (n = 3)	3	100	3	100	3	100	3	100
Sacace <i>C. burnetii</i> Real-TM (n = 2)	2	100	2	100	2	100	2	100
<i>In house</i> PCR assay (n = 40)	39	98	39	98	40	100	39	98

Other commercial tests (n = 4)	3	75	4	100	4	100	4	100
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§ Fraglich *Due to reporting questionable results, the number of true results has been reduced.*

Comments:

- The following tests are listed under "Other commercial tests": CerTest VIASURE Tick Borne Diseases Real Time PCR Detection Kit (1x), Gerbion diarella Q-Feber (1x), ID Gene Q Fever-Chlamydomphila spp (1x) and Master diagnostica (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 = 29	Proben Nr. (Sample no.)					Inhibition			
	01	02	03	04		01	02	03	04
Befund <i>Result</i>									
Positiv	28	29	0	0	n.d.	1	1	1	1
Negativ	1	0	29	29	nein <i>no</i>	28	28	28	28
Fraglich <i>Questionable</i>	0	0	0	0	ja <i>yes</i>	0	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 *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 <i>True positive results</i>				NAT richtig negativ <i>True negative results</i>			
	01		02		03		04	
	Absolut <i>Absolute</i>	%	Absolut <i>Absolute</i>	%	Absolut <i>Absolute</i>	%	Absolut <i>Absolute</i>	%
Altona RealStar Anthrax (n = 5)	5	100	5	100	5	100	5	100
FILMARRAY BioThreat Panel (n = 3)	3	100	3	100	3	100	3	100
LightMix B. anthracis (n = 1)	1	100	1	100	1	100	1	100
<i>In house</i> PCR assay (n = 18)	17	94	18	100	18	100	18	100
Other commercial tests (n = 2)	2	100	2	100	2	100	2	100

Comments:

- The following tests are listed under "Other commercial tests": LiliF Diagnostics LiliF Anthrax PCR Kit (1x) and Sacace Biotechnologies Bacillus anthracis Real-TM (1x).