

**PCR-/NAT *Borrelia burgdorferi*
 (RV 535) Mai 2015**



Tabelle 1: Probenzusammensetzung und erwartetes Ergebnis.

Sample composition and expected results.

	<i>Erwartet / expected</i>		<i>Probenzusammensetzung / Sample composition</i>
1515351	∅	62	<i>Borrelia miyamotoi</i> (~ 1x10 ³ organisms/mL)
1515352	+++	61	<i>Borrelia bavariensis</i> (~ 1x10 ⁵ organisms/mL)
1515353	+++	61	<i>Borrelia garinii</i> Ospa Typ 8 (~ 1x10 ⁵ organisms/mL)
1515354	++	61	<i>Borrelia kurtenbachi</i> (~ 1x10 ⁴ organisms/mL)

Tabelle 2: Häufigkeit der Mitteilung verschiedener Befunde.

Absolute numbers of reported individual results.

<i>n = 128</i>	<i>Probennummer (Sample no.)</i>					<i>Inhibition</i>			
	1515351	1515352	1515353	1515354		1515351	1515352	1515353	1515354
Befund <i>Result</i>									
Positiv	36 ¹⁾	126	128	121	n.d.	0	0	0	0
Negativ	88 ¹⁾	1	0	7	nein <i>no</i>	128	128	128	128
Fraglich <i>Questionable</i>	4 ¹⁾	1	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 <i>True negative results</i>		
	Absolut <i>Absolute</i>	Relativ <i>Relative</i>	%	Absolut <i>Absolute</i>	Relativ <i>Relative</i>	%
artus <i>Borrelia</i> LC Kit [20] (n = 26)	88	88 / 103 §	85	0	0 / 0	0
Demeditec GenFlow [21] (n = 4)	11	11 / 16	69	0	0 / 0	0
LightMix <i>Borrelia</i> [22] (n = 9)	25	25 / 35 §	71	0	0 / 0	0
Other/commercial tests [27] (n = 34)	114	114 / 134 §	85	0	0 / 0	0
<i>In house</i> PCR assay [28] (n = 56)	175	175 / 222 §	79	0	0 / 0	0
Andere / k.A. / other [29] (n= 2)	7	7 / 8	88	0	0 / 0	0

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

* Durch Mehrfachnennung oder fehlende Angabe kann die absolute Zahl der Ergebnisse (Tab. 2) von der Anzahl der Teilnehmer abweichen.
 Due to reporting results of multiple assay systems or missing specifications, the effective numbers are not correlating with the number of participants

Comments: ¹⁾ As sample #1515351 contained a very low number of *Borrelia miyamotoi* organisms, negative PCR results were not rated “false negative”, but the participants may consider improving the analytical specificity of corresponding PCR assays.