

PCR-/NAT MRSA / cMRSA (RV 539) Mai 2025



Tabelle 1: Probenzusammensetzung und erwartetes Ergebnis.

Sample composition and expected results.

Proben Nr.	Erwartet / expected	Probenzusammensetzung / Sample composition
539A 250520 01	++	61 / 71,72 cMRSA (<i>S. aureus</i> , oxa ^R , PVL-pos) (~ 5x10 ⁴ CFU/mL)
539A 250520 02	Ø	62 <i>Escherichia coli</i> K12
539A 250520 03	++	61 / 72 MRSA (<i>S. aureus</i> , oxa ^R , PVL-neg) (~ 5x10 ⁴ CFU/mL)
539A 250520 04	+++	61 / 72 MRSA (<i>S. aureus</i> , oxa ^R , PVL-neg) (~ 5x10 ⁵ CFU/mL) SCCmec PCR false negative!

Tabelle 2: Häufigkeit der Mitteilung verschiedener Befunde.

Absolute numbers of reported individual results.

<i>n</i> = 241	Proben Nr. (Sample no.)				Inhibition			
Befund Result	01	02	03	04	01	02	03	04
Positiv	232	1	232	40	n.d.	4	4	4
Negativ	8	239	6	195	nein no	237	236	237
Fraglich Questionable	1	1	3	6	ja yes	0	1	0

Tabelle 3: Häufigkeit richtig positiver und richtig negativer NAT-Befunde bei Anwenden 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 True positive results						NAT richtig negativ	
	01		03		04		02	
	Absolut Absolute	%	Absolut Absolute	%	Absolut Absolute	%	Absolut Absolute	%
Amplex eazyplex MRSA (n = 4)	4	100	3 [§]	100	4	100	4	100
Amplex eazyplex MRSA plus (n = 4)	2	50	0 [§]	50	3	75	4	100
BD MAX / BD GeneOhm MRSA (n = 37)	35	95	37	100	3	8	37	100
Bruker-HAIN FluoroType MRSA (n = 11)	11	100	11	100	1	9	11	100
Bruker-HAIN GenoType MRSA (n = 7)	4 [§]	71	5	71	7	100	7	100
Cepheid Xpert MRSA (n = 125)	124	99	125	100	5 [§] *	4	123*	99
HOLOGIC Panther Fusion MRSA (n = 6)	6	100	6	100	2	33	6	100
Immundiagnostik MutaPLEX MRSA (n = 3)	3	100	3	100	0	0	3	100

MIKROGEN alphaCube MRSA (n = 1)	1	100	1	100	0	0	1	100
MIKROGEN alphaCube PVL-MRSA (n = 6)	6	100	6	100	0	0	6	100
Cobas 5800, 6800 or 8800 MRSA (n = 2)	2	100	2	100	1	50	2	100
r-Biopharm RIDAGENE MRSA (n = 17)	17	100	17	100	5[§]	31	17	100
In house PCR assay (n = 12)	12	100	11	92	6[§]	55	12	100
Other commercial tests (n = 6)	5	83	5	83	3	50	6	100

[§] Fraglich *Due to reporting questionable results, the number of true results has been reduced.*

* Inhibition

Comments:

1. The following tests are listed under "Other commercial tests": BD MAX MRSA-XT (1x), Progenie RealCycler Panton-Valentine leukocidin toxin + Staphylococcus aureus + mecA (SAMAPV) (1x), Bioexen MRSA qPCR (1x) and GenomEra MRSA/SA AC Assay Kit (1x).