

PCR-/NAT Carbapenemasen (RV 544) Mai 2026



Tabelle 1: Probenzusammensetzung und erwartetes Ergebnis.

Sample composition and expected results.

Proben Nr.	Erwartet / expected		Probenzusammensetzung / Sample composition
544 260519 01	+++	61 / 73	<i>E. coli</i> OXA-244 (~ 1x10 ⁶ genome copies/mL)
544 260519 02	Ø	62	<i>Escherichia coli</i> K12
544 260519 03	+++	61 71,75	<i>K. pneumoniae</i> KPC-2 + NDM-1 (~ 1x10 ⁶ genome copies/mL)
544 260519 04	+++	61 / 75	<i>M. morganii</i> NDM-14 (~ 1x10 ⁶ genome copies/mL)

Tabelle 2: Häufigkeit der Mitteilung verschiedener Befunde.

Absolute numbers of reported individual results.

<i>n</i> = 85		Proben Nr. (Sample no.)				Inhibition				
Befund Result		01	02	03	04		01	02	03	04
Positiv		83	0	84	81	n.d.	1	1	1	1
Negativ		2	85	1	4	nein no	84	84	84	84
Fraglich Questionable		0	0	0	0	ja yes	0	0	0	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	%
AID Carbapenemase (n = 2)	2	100	2	100	2	100	2	100
Amplex eazypex SuperBug basic (n = 4)	4	100	4	100	4	100	4	100
eazypex superbug complete A, B or C (n = 8)	7	88	7	88	7	88	8	100
Amplex eazypex superbug expert (n = 1)	1	100	1	100	1	100	1	100
BD MAX Check-Points CPO assay (n = 2)	2	100	2	100	2	100	2	100
Cepheid Xpert Carba-R (n = 39)	38	97	39	100	38	97	39	100
MIKROGEN ampliCube MDR Panel 1- 5 (n = 1)	1	100	1	100	1	100	1	100

Seegene Allplex Entero-DR (n = 11)	11	100	11	100	11	100	11	100
TIB Molbiol Modular Carbapenemase (n = 4)	4	100	4	100	4	100	4	100
<i>In house</i> PCR assay (n = 11)	11	100	11	100	9	82	11	100
Other commercial tests (n = 2)	2	100	2	100	2	100	2	100

Comments:

1. Eighty-three of the 85 participants reported dedicated carbapenemase identification (carbapenemase genes). With the exception of a few false-negative results, especially for sample 544 260519 03, all laboratories reported correct results.
2. The following tests are listed under "Other commercial tests": BioMerieux BioFire FILMARRAY Pneumonia Panel plus (2x).