

PCR-/NAT Carbapenemasen (RV 544) Nov 2025



Tabelle 1: Probenzusammensetzung und erwartetes Ergebnis.

Sample composition and expected results.

Proben Nr.	Erwartet / expected		Probenzusammensetzung / Sample composition
544A 251014 01	+++	61 / 73	<i>E. coli</i> OXA-484 (~ 1x10 ⁶ genome copies/mL)
544A 251014 02	Ø	62	<i>Escherichia coli</i> K12
544A 251014 03	+++	61 / 73,75	<i>K. pneumoniae</i> NDM-1+OXA-48 (~ 1x10 ⁶ genome copies/mL)
544A 251014 04	+++	61 / 72	<i>E. aerogenes</i> VIM-1 (~ 1x10 ⁶ genome copies/mL)

Tabelle 2: Häufigkeit der Mitteilung verschiedener Befunde.

Absolute numbers of reported individual results.

<i>n</i> = 90		Proben Nr. (Sample no.)				Inhibition				
Befund Result		01	02	03	04		01	02	03	04
Positiv		88	2	90	89	n.d.	1	1	1	1
Negativ		2	88	0	1	nein no	89	89	89	89
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 = 9)	8	89	9	100	9	100	9	100
Amplex eazypex superbug expert (n = 1)	1	100	1	100	1	100	1	100
BD MAX Check-Points CPO assay (n = 3)	3	100	3	100	3	100	3	100
Cepheid Xpert Carba-R (n = 46)	46	100	46	100	46	100	45	98
MIKROGEN ampliCube MDR Panel 1- 5 (n = 1)	1	100	1	100	0	0	1	100
Seegene Allplex Entero-DR (n = 8)	8	100	8	100	8	100	8	100

TIB Molbiol Modular Carbapenemase (n = 5)	5	100	5	100	5	100	4	80
<i>In house</i> PCR assay (n = 9)	8	89	9	100	9	100	9	100
Other commercial tests (n = 2)	2	100	2	100	2	100	2	100

Comments:

1. Eighty-nine of the 90 participants reported dedicated carbapenemase identification (carbapenemase genes). Excluding the laboratories with false-positive and false-negative results, all but four laboratories reported correct results.
2. The following tests are listed under "Other commercial tests": BioMerieux BioFire FILMARRAY TORCH (1x) and Ustar Biotechnologies MultNAT CRE (1x).