

## PCR-/NAT Carbapenemasen (RV 544) Mai 2020



**Tabelle 1: Probenzusammensetzung und erwartetes Ergebnis.**

*Sample composition and expected results.*

	<i>Erwartet / expected</i>		<i>Probenzusammensetzung / Sample composition</i>
2015441	+++	61 / 73	<i>K. pneumoniae</i> OXA-232 (~ 1x10 <sup>7</sup> genome copies/mL)
2015442	+++	61 / 79	<i>Ent. cloacae</i> complex IMI-2 (~ 1x10 <sup>7</sup> genome copies/mL)
2015443	∅	62	<i>Escherichia coli</i> K12
2015444	+++	61 / 75	<i>Serratia marcescens</i> NDM-1 (~ 1x10 <sup>7</sup> genome copies/mL)

**Tabelle 2: Häufigkeit der Mitteilung verschiedener Befunde.**

*Absolute numbers of reported individual results.*

<i>n = 89</i>	<i>Probennummer (Sample no.)</i>				<i>Inhibition</i>				
	2015441	2015442	2015443	2015444	2015441	2015442	2015443	2015444	
<b>Befund</b> <i>Result</i>									
<b>Positiv</b>	87	14	2	89	n.d.	1	1	1	1
<b>Negativ</b>	2	74	86	0	nein <i>no</i>	88	88	88	88
<b>Fraglich</b> <i>Questionable</i>	0	1	1	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.*

<b>NAT-Methode</b> [Code] (total number *)	<b>NAT richtig positiv</b> <i>True positive results</i>						<b>NAT richtig negativ</b>	
	2015441		2015442		2015444		2015443	
	Absolut <i>Absolute</i>	%	Absolut <i>Absolute</i>	%	Absolut <i>Absolute</i>	%	Absolut <i>Absolute</i>	%
Amplex eazyplex (n = 6)	6	100	4	67	6	100	6	100
Cepheid Xpert Carba-R (n = 46)	46	100	1	2	46	100	45	98
Seegene Allplex Entero-DR (n = 3)	3	100	1	33	3	100	3	100
LightMix Modular Carbapenemase (n = 4)	4	100	0	0	4	100	3	75
Other commercial tests (n = 13)	12	92	6	46	13	100	13	100
<i>In house</i> PCR assay (n = 17)	16	94	2	12	17	100	16	94

**Comments:**

- <sup>1)</sup> 87 participants reported dedicated carbapenemase identification (carbapenemase genes)
- <sup>2)</sup> One participant has wrongly reported detection of the OXA gene in sample # 2015442.
- <sup>3)</sup> One participant has wrongly reported detection of the VIM gene in sample # 2015444.