

PCR-/NAT EHEC / STEC (RV 534) Mai 2025



Tabelle 1: Probenzusammensetzung und erwartetes Ergebnis.

Sample composition and expected results.

Proben Nr.	Erwartet / expected		Probenzusammensetzung / Sample composition
534A 250520 01	++	61 / 71,72,77,78	EHEC (~5x10 ⁴ CFU/mL) (<i>stx</i> -1, <i>stx</i> -2, <i>eae</i> , <i>hlyA</i> and O157 positive)
534A 250520 02	+++	61 / 72	EHEC (~5x10 ⁵ CFU/mL) (<i>stx</i> -2e positive)
534A 250520 03	Ø	62	<i>Escherichia coli</i> K12 (negative for <i>eae</i> and <i>hlyA</i>)
534A 250520 04	Ø	62	<i>Salmonella ent. ser. enteritidis</i> (~1x10 ⁴ CFU/mL)

Tabelle 2: Häufigkeit der Mitteilung verschiedener Befunde.

Absolute numbers of reported individual results.

<i>n</i> = 122		Proben Nr. (Sample no.)				Inhibition				
Befund Result		01	02	03	04		01	02	03	04
Positiv	122	119	2	1		n.d.	1	1	1	1
Negativ	0	3	120	120		nein no	121	121	121	121
Fraglich Questionable	0	0	0	1		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 True negative results			
	01		02		03		04	
	Absolut Absolute	%	Absolut Absolute	%	Absolut Absolute	%	Absolut Absolute	%
Altona RealStar EHEC PCR Kit (n = 2)	2	100	2	100	2	100	2	100
Amplex eazypex EHEC basic (n = 1)	1	100	1	100	1	100	1	100
Amplex eazypex EHEC complete (n = 7)	7	100	7	100	7	100	7	100
BD MAX Enteric Bacterial Panel (n = 9)	9	100	8	89	8	89	9	100
BioMerieux BioFire GI Panel (n = 5)	5	100	4	80	4	80	5	100
Bruker-HAIN GenoType EHEC (n = 7)	7	100	7	100	7	100	7	100
QiaStat-Dx Gastrointestinal Panel 2 (n = 1)	1	100	1	100	1	100	1	100
Roche UC-TIB-EHEC/C.diff (n = 5)	5	100	4	80	5	100	4	80

Seegene Allplex Gast. Bacteria II (n = 15)	15	100	15	100	15	100	15	100
Seegene Allplex GI-EB Screening (n = 6)	6	100	6	100	6	100	6	100
LightMix Modular stx-1/stx-2/eae (n = 4)	4	100	4	100	4	100	4	100
RIDAGENE E.coli Stool Panel I (n = 14)	14	100	14	100	14	100	14	100
RIDAGENE EHEC/EPEC (n = 15)	15	100	15	100	15	100	15	100
RIDAUNITY EHEC/EPEC (n = 3)	3	100	3	100	3	100	3	100
In house PCR assay (n = 21)	21	100	21	100	21	100	20 [§]	95
Other commercial tests (n = 7)	7	100	7	100	7	100	7	100

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

Comments:

1. The following tests are listed under "Other commercial tests": EHEC (Differenzierung) PCR (2x), - Hain LiquidArray Gastrointestinal Panel (1x), CerTest VIASURE E. coli EHEC, EPEC & EIEC Real Time PCR Detection Kit (1x), Luminex Gastrointestinal Pathogen Panel (1x), OptiGene Isothermal Master Mix (1x) and r-Biopharm surefast MFP 3 (1x).