

**PCR-/NAT EHEC / STEC
 (RV 534) Mai 2024**



Tabelle 1: Probenzusammensetzung und erwartetes Ergebnis.
Sample composition and expected results.

Proben Nr.	Erwartet / expected		Probenzusammensetzung / Sample composition
534A 240521 01	∅	62	<i>Escherichia coli</i> K12 (negative for <i>eae</i> and <i>hlyA</i>)
534A 240521 02	+++	61 / 71,78	EHEC (~5x10 ⁵ CFU/mL) (<i>stx-1c</i> and <i>hlyA</i> positive)
534A 240521 03	++	61 / 71,72,77,78	EHEC (~5x10 ⁴ CFU/mL) (<i>stx-1</i> , <i>stx-2</i> , <i>eae</i> , <i>hlyA</i> and O157 positive)
534A 240521 04	∅	62	EAEC <i>att</i> (negative for <i>eae</i> and <i>hlyA</i>) (~5x10 ⁵ CFU/mL)

Tabelle 2: Häufigkeit der Mitteilung verschiedener Befunde.
Absolute numbers of reported individual results.

n = 144	Proben Nr. (Sample no.)					Inhibition			
	01	02	03	04		01	02	03	04
Befund <i>Result</i>									
Positiv	0	142	143	3	n.d.	1	1	1	1
Negativ	144	2	1	141	nein <i>no</i>	143	143	143	143
Fraglich <i>Questionable</i>	0	0	0	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.

NAT-Methode [Code] (total number *)	NAT richtig positiv <i>True positive results</i>				NAT richtig negativ <i>True negative results</i>			
	02		03		01		04	
	Absolut <i>Absolute</i>	%	Absolut <i>Absolute</i>	%	Absolut <i>Absolute</i>	%	Absolut <i>Absolute</i>	%
Altona RealStar EHEC PCR Kit (n = 1)	1	100	1	100	1	100	1	100
Amplex eazyplex EHEC complete (n = 8)	7	88	8	100	8	100	8	100
BD MAX Enteric Bacterial Panel (n = 9)	9	100	8	89	9	100	9	100
BioMerieux BioFire GI Panel (n = 6)	6	100	6	100	6	100	5	83
Bruker-HAIN GenoType EHEC (n = 9)	9	100	9	100	9	100	9	100
ampliCube Gastroint. Bact. Panel 2 (n = 2)	2	100	2	100	2	100	2	100
Seegene Allplex GI-EB Screening (n = 7)	7	100	7	100	7	100	7	100
Seegene Allplex Gast. Bacteria II (n = 19)	19	100	19	100	19	100	19	100

LightMix Modular stx-1/stx-2/eae (n = 7)	7	100	7	100	7	100	7	100
RIDAGENE E.coli Stool Panel I (n = 15)	15	100	15	100	15	100	15	100
RIDAGENE EHEC/EPEC (n = 21)	21	100	21	100	21	100	21	100
In house PCR assay (n = 27)	26	96	27	100	27	100	26	96
Other commercial tests (n = 13)	13	100	13	100	13	100	12	92

Comments:

1. The following tests are listed under "Other commercial tests": Qiagen QiaStat-Dx Gastrointestinal Panel 2 (2x), AmpliGnost EHEC (Differenzierung) PCR (1x), AusDiagnostics Faecal Pathogens M 16-well (1x), Bruker-Hain Fluorotype (1x), Bruker-Hain LiquidArray Gastrointestinal Panel (1x), CerTest VIASURE E. coli EHEC, EPEC & EIEC Real Time PCR Detection Kit (1x), Genetic Signatures EasyScreen Pan Enteric Pathogen Detection (1x), Luminex Gastrointestinal Pathogen Panel (1x), MOBIDIAG Amplidiag Bacterial GE kit (1x), OptiGene Isothermal Master Mix (1x), and r-Biopharm RIDA UNITY EHEC/EPEC (1x).