

## PCR-/NAT EHEC / STEC (RV 534) November 2013



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

	Erwartet / expected		Probenzusammensetzung / Sample composition
1325341	+++	61 / 71,77,78	EHEC (~1x10 <sup>5</sup> CFU/mL) (stx-1, eae, hlyA and O157 positive)
1325342	++	61 / 71,72,77,78	EHEC (~1x10 <sup>4</sup> CFU/mL) (stx-1, stx-2, eae, hlyA and O157 positive)
1325343	+++	61 / 72,76,77	EHEC (~1x10 <sup>5</sup> CFU/mL) ( <b>stx-2f</b> and eae positive)
1325344	Ø	62	<i>Escherichia coli</i> K12 (negative for eae and hlyA)

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

<b>n = 104</b>	Probennummer (Sample no.)					Inhibition			
	1325341	1325342	1325343	1325344		1325341	1325342	1325343	1325344
<b>Befund Result</b>									
<b>Positiv</b>	101 <sup>1)</sup>	98 <sup>1)</sup>	25 <sup>1)</sup>	2					
<b>Negativ</b>	3	6	79 <sup>2)</sup>	102					
<b>Fraglich Questionable</b>	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 True positive results			NAT richtig negativ True negative results		
	Absolut Absolute	Relativ Relative	%	Absolut Absolute	Relativ Relative	%
Hain GenoType EHEC [20] (n = 24)	47	47 / 72	65	24	24 / 24	100
Hyplex EHEC [21] (n = 5)	10	10 / 15	67	5	5 / 5	100
r-Biopharm RIDAGENE [22] (n = 14)	36	36 / 42	86	13	13 / 14	93
Other commercial tests [27] (n = 9)	21	21 / 27	78	9	9 / 9	100
In house PCR assay [28] (n = 51)	110	110 / 153	72	50	50 / 51	98
Andere/ k.A. / other [29] (n = 3)	4	4 / 9	44	3	3 / 3	100

**Comments:** <sup>1)</sup> Partial or complete shiga-toxin subtyping, eae-, and hlyA-detection was performed by 95 laboratories.

With the exception of 5 laboratories, all reported results were correct.

<sup>2)</sup> As the clinical relevance of shiga toxin 2f positive EHEC is not proven yet, negative PCR results were not rated as "false negative".