

**PCR-/NAT EHEC / STEC  
 (RV 534) Mai 2023**



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

*Sample composition and expected results.*

Proben Nr.	Erwartet / expected		Probenzusammensetzung / Sample composition
534 230523 01	+	61 / 72	EHEC (~1x10 <sup>4</sup> CFU/mL) ( <i>stx-2g</i> positive) ETEC ST1a positive (~1x10 <sup>4</sup> CFU/mL)
534 230523 02	∅	62	<i>Aeromonas hydrophila</i> (~1x10 <sup>5</sup> CFU/mL)
534 230523 03	∅	62	<i>Escherichia coli</i> K12 (negative for <i>eae</i> and <i>hlyA</i> )
534 230523 04	++	61 / 71,72,78	EHEC (~1x10 <sup>5</sup> CFU/mL) ( <i>stx-1a</i> , <i>stx-2a</i> and <i>hlyA</i> positive)

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

*Absolute numbers of reported individual results.*

n = 141	Proben Nr. (Sample no.)					Inhibition			
	01	02	03	04		01	02	03	04
<b>Befund</b> <i>Result</i>									
<b>Positiv</b>	137	2	3	133	n.d.	0	0	0	0
<b>Negativ</b>	3	138	137	8	nein <i>no</i>	141	141	141	141
<b>Fraglich</b> <i>Questionable</i>	1	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.*

NAT-Methode [Code] (total number *)	NAT richtig positiv <i>True positive results</i>				NAT richtig negativ <i>True negative results</i>			
	01		04		02		03	
	Absolut <i>Absolute</i>	%	Absolut <i>Absolute</i>	%	Absolut <i>Absolute</i>	%	Absolut <i>Absolute</i>	%
Altona RealStar EHEC PCR Kit (n = 2)	2	100	2	100	2	100	2	100
Amplex eazyplex EHEC classic (n = 1)	1	100	1	100	1	100	1	100
Amplex eazyplex EHEC complete (n = 6)	6	100	5	83	6	100	6	100
BD MAX Enteric Bacterial Panel (n = 5)	5	100	5	100	5	100	5	100
BioMerieux BioFire GI Panel (n = 6)	6	100	6	100	6	100	6	100
Bruker-HAIN GenoType EHEC (n = 14)	14	100	13	93	14	100	14	100
ampliCube Gastroint. Bact. Panel 2 (n = 2)	2	100	2	100	2	100	2	100
Seegene Allplex GI-EB Screening (n = 2)	2	100	2	100	2	100	2	100

<b>Seegene Allplex Gast. Bacteria II (n = 12)</b>	<b>12</b>	<b>100</b>	<b>10</b>	<b>83</b>	<b>12</b>	<b>100</b>	<b>12</b>	<b>100</b>
<b>LightMix Modular stx-1/stx-2/eah (n = 7)</b>	<b>7</b>	<b>100</b>	<b>7</b>	<b>100</b>	<b>7</b>	<b>100</b>	<b>7</b>	<b>100</b>
<b>RIDAGENE E.coli Stool Panel I (n = 12)</b>	<b>12</b>	<b>100</b>	<b>11</b>	<b>92</b>	<b>11</b>	<b>92</b>	<b>10</b>	<b>83</b>
<b>RIDAGENE EHEC/EPEC (n = 28)</b>	<b>28</b>	<b>100</b>	<b>26</b>	<b>93</b>	<b>28</b>	<b>100</b>	<b>28</b>	<b>100</b>
<b>In house PCR assay (n = 35)</b>	<b>31<sup>§</sup></b>	<b>92</b>	<b>34</b>	<b>97</b>	<b>34<sup>§</sup></b>	<b>100</b>	<b>34<sup>§</sup></b>	<b>100</b>
<b>Other commercial tests (n = 9)</b>	<b>9</b>	<b>100</b>	<b>9</b>	<b>100</b>	<b>8</b>	<b>89</b>	<b>8</b>	<b>89</b>

<sup>§</sup> 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": Amplex Variplex EHEC (1x), MOBIDIAG Amplidiag Bacterial GE Kit (1x), AmpliGnost EHEC (Differenzierung) PCR Kit (1x), AusDiagnostics Faecal Pathogen M (16-well) (1x), Qiagen QiaStat-Dx Gastrointestinal Panel 2 (2x), Viasure E.Coli Genotyp (1x), Genetic Signatures EasyScreen kit (1x) and r-Biopharm RIDA UNITY EHEC/EPEC (1x).