

Food and Environmental Proficiency Testing Unit

Laboratory Identification no. (Check) **Lab No.**

Dispatch date: **27 January 2025**

Final date for return of results: **21 February 2025**

Contact details:

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**RESULTS TO BE RETURNED VIA ONLINE SURVEY AS PER
LINK: [STX17 - online results entry](#)**

Shiga-toxin producing *Escherichia coli* - Food and Environmental Proficiency Testing Unit

Shiga toxin producing <i>Escherichia coli</i> (STEC) Request/Report Form	
Distribution No.: STX17	Sample numbers: STX033 & STX034
Download the sample Instruction sheet	Shiga-toxin producing <i>E. coli</i> Scheme Instruction Sheet
Download the safety data sheet:	Safety data sheet - LENTICULE
<i>If you cannot examine any of these samples return your results as 'Not examined'</i>	
Request:	I. Examine samples for STEC genes

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SAMPLE: STX033

STEC / VTEC / EHEC (Shiga / verocytotoxic / enterohemorrhagic) testing:-

	Target Genes	Positive (circle)	CT value		Not examined	Serogroup (e.g. O157)	Positive (circle)	CT value	Serotype (e.g. H7)	Positive (circle)	CT value
STEC virulence gene detection	<i>stx</i> (<i>stx</i> 1/2 combined)	Yes / No / NE		STEC identification gene detection	☐	O157	Yes / No / NE			Yes / No / NE	
	<i>stx</i> 1	Yes / No / NE				O26	Yes / No / NE			Yes / No / NE	
	<i>stx</i> 2	Yes / No / NE				O103	Yes / No / NE			Yes / No / NE	
	<i>eae</i>	Yes / No / NE				O104	Yes / No / NE			Yes / No / NE	
	Other	Yes / No / NE				O111	Yes / No / NE			Yes / No / NE	
						O145	Yes / No / NE			Yes / No / NE	
						Other.....	Yes / No / NE			Yes / No / NE	

Interpretation of results:-

Select interpretation of your results		Explanation
☐	Not examined / Not applicable	
☐	STEC not detected in the test portion of x g or x ml	
☐	Presumptive detection of STEC in the test portion of x g or x ml	
☐	Presumptive detection of STEC causing the attaching and effacing lesion in the test portion of x g or x ml	
☐	Presumptive detection of STEC of xx serogroup in the test portion of x g or x ml	
☐	Other:	

Food and Environmental Proficiency Testing Unit

Laboratory Identification no. (Check) **Lab No.****SAMPLE: STX034**

STEC / VTEC / EHEC (Shiga / verocytotoxic / enterohemorrhagic) testing:-

	Target Genes	Positive (circle)	CT value		Not examined	Serogroup (e.g. O157)	Positive (circle)	CT value	Serotype (e.g. H7)	Positive (circle)	CT value
STEC virulence gene detection	<i>stx</i> (<i>stx</i> 1/2 combined)	Yes / No / NE		STEC identification gene detection	☐	O157	Yes / No / NE			Yes / No / NE	
	<i>stx</i> 1	Yes / No / NE				O26	Yes / No / NE			Yes / No / NE	
	<i>stx</i> 2	Yes / No / NE				O103	Yes / No / NE			Yes / No / NE	
	<i>eae</i>	Yes / No / NE				O104	Yes / No / NE			Yes / No / NE	
	Other	Yes / No / NE				O111	Yes / No / NE			Yes / No / NE	
						O145	Yes / No / NE			Yes / No / NE	
						Other.....	Yes / No / NE			Yes / No / NE	

NE = Not Examined

Interpretation of results:-

Select interpretation of your results	Explanation
☐ Not examined / Not applicable	
☐ STEC not detected in the test portion of x g or x ml	
☐ Presumptive detection of STEC in the test portion of x g or x ml	
☐ Presumptive detection of STEC causing the attaching and effacing lesion in the test portion of x g or x ml	
☐ Presumptive detection of STEC of xx serogroup in the test portion of x g or x ml	
☐ Other:	

Store LENTICULE disc samples @ -20°C ± 5°C

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Any further comments:-

Authorised by:

Date reported:

METHOD QUESTIONNAIRE – not all findings will be presented in the scheme report (include as much detail as possible or references):

1. Do you exactly follow ISO/TS 13136:2012 <i>Microbiology of food and animal feed -- Real-time polymerase chain reaction (PCR)-based method for the detection of food-borne pathogens - Horizontal method for the detection of Shiga toxin-producing Escherichia coli (STEC) and the determination of O157, O111, O26, O103 and O145 serogroups</i>	YES	NO
2. If the answer to question 1 is NO please state deviations to ISO/TS 13136:2012		
3. For routine samples, briefly describe your enrichment process e.g. 25 g into 225 ml mTSB+N/BPW 41.5 °C for 24hr		
4. Provide the details of your DNA extraction kit Include company name, kit name, protocol(s) if applicable: e.g., Promega, Maxwell® 16 Cell DNA purification kit		
5. If your DNA extraction process requires a platform please state platform used		

6. State if you use conventional PCR or real-time PCR																																								
7. If using a <u>commercial kit</u> for primer / probe / amplification mix Please provide company name, kit name: e.g., Bio-Rad, IQ-Check STEC SerO; Bio-Rad IQ-Check® STEC VirX																																								
8. What volume of extracted DNA is used?																																								
9. Please complete the Cycle information tables	Pre-incubation: <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%; background-color: #cccccc;">Time (hh:mm:ss)</td> <td style="width: 25%;"></td> <td style="width: 25%; background-color: #cccccc;">Temperature (°C)</td> <td style="width: 25%;"></td> </tr> </table> Cycle information: <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <tr style="background-color: #cccccc;"> <th style="width: 15%;">Parameter</th> <th style="width: 15%;">Denaturisation</th> <th colspan="4" style="width: 50%;">Cycling</th> <th style="width: 15%;">Cooling</th> </tr> <tr> <td style="background-color: #cccccc;">Cycles</td> <td>x1</td> <td colspan="4">x.....</td> <td>x1</td> </tr> <tr> <td style="background-color: #cccccc;">Temperature (°C)</td> <td></td> <td style="background-color: #cccccc;">Step 1:</td> <td style="background-color: #cccccc;">Step 2:</td> <td style="background-color: #cccccc;">Step 3:</td> <td style="background-color: #cccccc;">Step 4:</td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td style="background-color: #cccccc;">Hold (hh:mm:ss)</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table> Other:	Time (hh:mm:ss)		Temperature (°C)		Parameter	Denaturisation	Cycling				Cooling	Cycles	x1	x.....				x1	Temperature (°C)		Step 1:	Step 2:	Step 3:	Step 4:									Hold (hh:mm:ss)						
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Temperature (°C)		Step 1:	Step 2:	Step 3:	Step 4:																																			
Hold (hh:mm:ss)																																								

10. Amplification platform used

e.g. Bio-Rad CFX96 Touch™ Deep Well
RT-PCR Detection Systems

**11. Please use this space for any
additional comments you feel are
relevant or general comments about the
scheme**