



## Curian<sup>®</sup> Shiga Toxin

**Rapid, reliable answers to protect patients and control outbreaks**

Curian Shiga Toxin is a simple fluorescent immunoassay that detects and differentiates Shiga toxins 1 and 2 from enriched stool cultures. Clear toxin identification enables rapid confirmation of Shiga toxin-producing *E. coli* (STEC), supporting appropriate patient management and helping clinicians avoid antibiotics that may worsen outcomes.

# Curian Shiga Toxin

## The Challenge

- STEC remains one of the leading foodborne illnesses causing hospitalizations in the United States each year<sup>1</sup>
- Traditional culture methods miss all non-O157 serotypes and can have sensitivity as low as 50%<sup>2</sup>
- Non-O157 serotypes account for nearly half of all STEC infections<sup>3</sup>
- Accurate STEC diagnosis is critical, as inappropriate antibiotic use can trigger increased Shiga toxin release and elevate the risk of hemolytic uremic syndrome (HUS)<sup>4</sup>

## The Need

- Clinical laboratories require guideline-supported testing capable of detecting all pathogenic STEC serotypes—not just O157
- Clear differentiation of Shiga toxin 1 vs Shiga toxin 2 to assess HUS risk and support appropriate clinical follow-up
- A streamlined workflow with faster turnaround times to enhance operational efficiency and support timely, appropriate patient management

## Curian Shiga Toxin Delivers

- Detects all Shiga toxin-producing *E. coli*, including non-O157 serotypes, for broader and more reliable identification
- Fluorescent technology eliminates subjectivity and differentiates Shiga toxin 1 and 2 for clear, definitive results
- A simple three-step process with LIS connectivity streamlines operations and integrates easily into laboratory workflows
- Results up to 24 hours earlier than traditional culture, allowing clinicians to act quickly and efficiently

## Specifications

### CLIA Status

Moderate

### Turnaround Time

20 minutes

### Sample Type

Fresh unpreserved stool or stool preserved in C&S or Cary-Blair

### Sample Storage

Frozen (-20 C) or 2-8 C

### Kit Storage

2-8 C

### Performance

STX 1: Sensitivity 100%, Specificity 99.4%

STX 2: Sensitivity 100%, Specificity 99.5%

### Catalog Number

760630

### CPT Code

Broth Enrichment: 87015

STX 1: 87427

STX 2: 87427-59



For more information on the Curian Shiga Toxin products, contact a specialist at [meridianbioscience.com/contactus](https://meridianbioscience.com/contactus)

- References:**
1. U.S. Food and Drug Administration. (n.d.). *Most common foodborne illnesses* [Fact sheet]. <https://www.fda.gov/files/food/published/Most-Common-Foodborne-Illnesses-%28PDF%29.pdf> U.S. Food and Drug Administration
  2. Thorpe, C. M. (2004). Shiga toxin-producing *Escherichia coli* infection. *Clinical Infectious Diseases*, 38(9), 1298–1303. <https://doi.org/10.1086/383473>
  3. Johnson, K. E., Thorpe, C. M., & Sears, C. L. (2006). The emerging clinical importance of non-O157 Shiga toxin-producing *Escherichia coli*. *Clinical Infectious Diseases*, 43(12), 1587–1595. <https://doi.org/10.1086/509573>
  4. Centers for Disease Control and Prevention. (2009). *Recommendations for diagnosis of Shiga toxin-producing Escherichia coli infections by clinical laboratories*. *MMWR Recommendations and Reports*, 58(RR-12), 1–20. <https://www.cdc.gov/mmwr/preview/mmwrhtml/rr5812a1.htm>