



curian[®]
Shiga Toxin

The first fluorescent immunoassay for the detection of Shiga toxins 1 and 2 in broth cultures derived from stool specimens

Curian[®] Shiga Toxin is a rapid diagnostic tool that provides clinicians with actionable results to ensure appropriate patient management.

Shiga toxin-producing *E. coli* (STEC) remains one of the most common foodborne pathogens resulting in hospitalizations each year.¹

- Proper diagnosis is essential as antibiotics are not recommended for treatment. Antibiotics can increase Shiga toxin release, which can lead to Hemolytic Uremic Syndrome, a potentially life-threatening complication.¹
- When it comes to diagnosing *E. coli* infections, using a broth is best. Testing from an overnight growth of enrichment broth is a CDC recommended approach as the amount of free toxin may not be detectable from direct testing of stool.¹

Follow Guideline Recommendations

- CDC and JCAHO recommend that all stools be tested for Shiga toxin-producing *E. coli*¹.
- Testing from an overnight growth of enrichment broth is recommended as the amount of free toxin may not be detectable from unenriched stool.

Increased Sensitivity over traditional methods

- Detects and differentiates between Shiga toxins 1 and 2 with results up to 24 hours earlier than traditional culture methods.
- Proper diagnosis is necessary as Shiga toxin 2 is associated with an increased risk of HUS.
- Half of all STEC infections are caused by non-O157 serotypes.² SMAC culture will miss all non-O157 serotypes and has been shown to have a sensitivity as low as 50%³.
- Curian[®] provides a digital test result that eliminates the risk of subjective analysis by the technologist.

Curian[®] Shiga Toxin Procedure Steps

Sample to result in 3 steps
Less than 1 minute hands on time



1 Discharge sample



2 Add sample to card



3 Place card into instrument and start

Product Specifications

Curian[®] Shiga Toxin is a rapid, qualitative fluorescent immunoassay for the simultaneous detection and differentiation of Shiga toxin 1 and Shiga toxin 2 in a single test device. It is intended for use with cultures derived from human stool specimens to aid in the diagnosis of disease caused by Shiga toxin-producing *E. coli* (STEC) infections.

Time to Result

20 minutes

Sample Type

Preserved & unpreserved stool specimens

Sample Storage

- Preserved specimens may be held for up to 5 days refrigerated or 14 days frozen
- Unpreserved specimens may be held for up to 2 hours refrigerated or 14 days frozen
- Broth cultures may be held for up to 7 days refrigerated or 21 days frozen
- Broth cultures may be frozen and thawed twice

Kit Storage

30 device cards, 30 Aiopreps, 66 transfer pipettes, positive control

Store the kit at 2-8°C

Performance

	Sensitivity	Specificity
Shiga Toxin 1	100%	99.4%
Shiga Toxin 2	100%	99.5%

Catalog Number

Curian[®] Shiga Toxin — 760630

CPT Codes

Broth enrichment 87015
Curian Shiga Toxin
87427, 87427-59

References

1. Centers for Disease Control and Prevention, Recommendations for Diagnosis of Shiga Toxin-Producing *Escherichia coli* Infections by Clinical Laboratories, MMWR, October 16, 2009; 58 No. (RR-12): pp. 1-20
2. <http://blogs.cdc.gov/publichealthmatters/2010/a-primer-on-e-coli-o145/>
3. C. Thorpe, Shiga Toxin-Producing *Escherichia coli* Infection, Clinical Infectious Diseases, 2004, Vol. 38: pp. 1298-1303

Ready to get a handle on *E. coli* testing? Let's talk.

Contact a specialist at 1-888-763-6769.

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