



# Test Definition: FLLYS

Limulus Amebocyte Lysate, Endotoxin

## Overview

### Method Name

Kinetic

### NY State Available

No

## Specimen

### Specimen Type

Varies

### Specimen Required

**Specimen Type:** Aqueous solutions

**Container/Tube:** Nonpyrogenic, plastic, leak-proof container

**Specimen Volume:** 5 mL

**Collection Instructions:** Send 5 mL frozen aqueous solutions collected in a nonpyrogenic, plastic, leak-proof container used in patient management.

### Specimen Minimum Volume

3 mL

### Reject Due To

Glass tubes	Reject
Body fluids	Reject

### Specimen Stability Information

Specimen Type	Temperature	Time	Special Container
Varies	Frozen	72 hours	

## Clinical & Interpretive

### Clinical Information

Amoebocyte lysate from the horseshoe crab (*Limulus polyphemus*) is a sensitive indicator of the presence of endotoxin. A limulus amoebocyte lysate (LAL) test can be used to test for endotoxins in dialysis water as well as biological products, parenteral drugs, and medical devices. This test is not intended for detecting endotoxin in clinical samples or diagnosing disease.(1)

Bacteria that contaminate dialysis fluid are mainly gram negative. Contamination usually comes from water used to prepare for dialysis fluid. Endotoxins can enter the bloodstream from the dialysis fluid. Endotoxins are associated with chronic inflammation that may lead to increased cardiovascular risk and mortality in hemodialysis patients.(2,3)

Bacterial derivatives other than lipopolysaccharides can also cause inflammation in hemodialysis patients but are not detectable by this assay.(4)

**Reference Values**

<0.05 EU/mL

**Clinical Reference**

1. Limulus amebocyte lysate (LAL) Kinetic-QCL(TM). Package insert. Lonza Walkersville, Inc; 2019
2. Arizono K, Nomura K, Motoyama T, et al. Use of ultrapure dialysate in reduction of chronic inflammation during hemodialysis. Blood Purif. 2004;22 Suppl 2:26-29
3. Zimmermann J, Herrlinger S, Pruy A, Metzger T, Wanner C. Inflammation enhances cardiovascular risk and mortality in hemodialysis patients. Kidney Int. 1999;55(2):648-658
4. Glorieux G, Neiryck N, Veys N, Vanholder R. Dialysis water and fluid purity: more than endotoxin. Nephrol Dial Transplant. 2012;27(11):4010-4021

**Performance****PDF Report**

Referral

**Day(s) Performed**

Tuesday-Saturday

**Report Available**

3 to 7 days

**Performing Laboratory Location**

Quest Diagnostics Nichols Institute

**Fees & Codes****Fees**

- Authorized users can sign in to [Test Prices](#) for detailed fee information.
- Clients without access to Test Prices can contact [Customer Service](#) 24 hours a day, seven days a week.
- Prospective clients should contact their account representative. For assistance, contact [Customer Service](#).

**CPT Code Information**

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87999

**LOINC® Information**

Test ID	Test Order Name	Order LOINC® Value
FLLYS	Limulus Lysate	33643-8

Result ID	Test Result Name	Result LOINC® Value
FLLYS	Limulus Lysate	33643-8