

## Overview

### Useful For

Suggesting the presence of pathogens such as *Salmonella*, *Shigella*, and amebiasis

### Method Name

Microscopic

Includes trichrome stain.

### NY State Available

Yes

## Specimen

### Specimen Type

Fecal

### Specimen Required

**Supplies:** ECOFIX Stool Transport Vial (Kit) (T219)

#### Container/Tube:

**Preferred:** ECOFIX preservative

**Acceptable:** Polyvinyl alcohol (PVA) preservative

**Specimen Volume:** Representative portion of collection

#### Collection Instructions:

1. Collect a random fecal specimen.
2. Carefully follow instructions on container.

### Forms

[If not ordering electronically, complete, print, and send](#) a [Microbiology Test Request](#) (T244) with the specimen.

### Reject Due To

All specimens will be evaluated at Mayo Clinic Laboratories for test suitability.

### Specimen Stability Information

Specimen Type	Temperature	Time	Special Container
Fecal	Ambient (preferred)	21 days	PVA OR ECOFIX
	Refrigerated	21 days	PVA OR ECOFIX

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## Clinical and Interpretive

### Clinical Information

Leukocytes are not normally seen in feces in the absence of infection or other inflammatory processes. Fecal leukocytosis is a response to infection with microorganisms that invade tissue or produce toxins, which causes tissue damage.

Fecal leukocytes are commonly found in patients with shigellosis and salmonellosis and sometimes in amebiasis. Mononuclear cells are found in typhoid fever.

Ulcerative colitis may also be associated with fecal leukocytosis.

### Reference Values

Interpretive report

### Interpretation

When fecal leukocytes are found they are reported in a semiquantitative manner: "few" indicates < or =2/oil immersion microscopic field (OIF); "moderate" indicates 3/OIF to 9/OIF; "many" indicates > or =10/OIF.

The greater the number of fecal leukocytes, the greater the likelihood that an invasive pathogen such as *Salmonella* or *Shigella* is present.

Few or no leukocytes and many erythrocytes suggests amebiasis.

Fecal leukocytes are rarely seen in diarrheas caused by other parasites or viruses.

### Cautions

Fecal leukocyte examinations cannot be performed on formalin-preserved specimens. Therefore, ECOFIX-preserved or polyvinyl alcohol-preserved feces must be sent to the laboratory.

### Clinical Reference

Pickering LK, DuPont HL, Olarte J, et al: Fecal leukocytes in enteric infections. *Am J Clin Pathol* 1977;68:562-565

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## Performance

### Method Description

Feces preserved in ECOFIX preservative or polyvinyl alcohol are stained with trichrome. (Garcia LS: *Diagnostic Medical Parasitology*. Fifth edition. ASM Press Dec 28, 2007)

### PDF Report

No

### Day(s) Performed

Monday through Saturday

### Report Available

1 to 2 days

### Specimen Retention Time

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3 days

**Performing Laboratory Location**

Rochester

**Fees and 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 Regional Manager. For assistance, contact [Customer Service](#).

**Test Classification**

This test has been cleared, approved or is exempt by the U.S. Food and Drug Administration and is used per manufacturer's instructions. Performance characteristics were verified by Mayo Clinic in a manner consistent with CLIA requirements.

**CPT Code Information**

89055

**LOINC® Information**

Test ID	Test Order Name	Order LOINC Value
LEU	Fecal Leukocytes	13655-6

Result ID	Test Result Name	Result LOINC Value
LEU	Fecal Leukocytes	13655-6