

Overview

Useful For

Detection and identification of parasitic protozoa and the eggs and larvae of parasitic helminths

Reflex Tests

Test Id	Reporting Name	Available Separately	Always Performed
BCON	Concentrate Exam	No, (Bill Only)	No
BDIR	Direct Prep Exam	No, (Bill Only)	No
BTRI	Stain Slide Exam	No, (Bill Only)	No
FILB	Filaria Bill Only	No, (Bill Only)	No

Testing Algorithm

Reflex testing will be added and performed by the laboratory based on the following criteria:

- Specimen source
- Specimen type: Unpreserved, refrigerate versus preserved
- Indication of parasites suspected

Method Name

Microscopic

May include Touch/Tease Preparation, Direct Wet Preparation, Concentrated Wet Preparation, Permanent (Trichrome or Giemsa) Stained Preparation.

NY State Available

Yes

Specimen

Specimen Type

Varies

Ordering Guidance

If specimens are suspected of containing tapeworm segments or other adult worms or worm segments, the suspected worm should be placed in 70% alcohol and order PARID / Parasite Identification, Varies.

If microsporidia are suspected:

- For non-stool/non-urine specimen, order MTBS / Microsporidia Stain, Varies
- For feces or urine, order LCMSP / *Microsporidia* species, Molecular Detection, PCR, Varies

If pinworm is suspected, order PINW / Pinworm Exam, Perianal. Perianal skin sampling using clear cellophane tape or a

SWUBE device is required for this test.

Urine specimens should be sent for SHUR / *Schistosoma* Exam, Random, Urine or TVRNA / *Trichomonas vaginalis*, Nucleic Acid Amplification, Varies as applicable.

If scabies is suspected, submit skin scrapings and order PARID / Parasite Identification, Varies.

Duodenal aspirates, small bowel aspirates, or colonic washings should be placed in Ecofix in a ratio of 1:1 and order OAP / Ova and Parasite, Concentrate and Permanent Smear, Microscopy, Feces.

For preserved stool analysis, order OAP / Ova and Parasite, Concentrate and Permanent Smear, Microscopy, Feces.

Necessary Information

Specify on the order if a specific parasite is suspected.

Indicate source on the label of the specimen.

Specimen Required

Specimen Type: Bile

Container/Tube: Sterile container

Specimen Volume: Entire collection

Specimen Type: Bone marrow

Container/Tube: Lavender top (EDTA) and/or slides

Specimen Volume: 4 mL

Collection Instructions:

1. Bone marrow and/or slides will be accepted for this test.
2. If submitting slides with EDTA tube, label and bag specimens together. Send refrigerate as one collection.

Specimen Type: Spinal fluid

Container/Tube: Sterile container

Specimen Volume: 1 mL

Specimen Type: Fluid, abscess, drainage material

Sources: Abdominal, ascites, brain, cyst, (also specify location of cyst) liver, lymphatic, peritoneal, splenic

Container/Tube: Sterile container

Specimen Volume: 15 mL

Collection Instructions:

1. Place half of collection into preservative (Ecofix or PVA and Formalin) in a ratio of 1:1.
2. Place other half of collection in a sterile container.
3. Label both specimens, bag together, and send refrigerate as one collection.

Specimen Type: Respiratory

Source: Bronchial washing, bronchoalveolar lavage, sputum

Container/Tube: Sterile container

Specimen Volume: Entire collection

Specimen Type: Tissue

Sources: Bladder, brain, colon, intestine, liver, lymph node, lung, muscle, rectal, spleen

Container/Tube: Sterile container

Specimen Volume: 5-10 mm

Collection Instructions: Place specimen in 1 to 2 drops of sterile saline to keep tissue moist.

Forms

If not ordering electronically, complete, print, and send a [Gastroenterology and Hepatology Client Test Request \(T728\)](#) with the specimen.

Specimen Minimum Volume

Respiratory specimens, spinal fluid, abscess, or drainage material: 0.5 mL

Tissue: 3 mm

Reject Due To

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

Specimen Stability Information

Specimen Type	Temperature	Time	Special Container
Varies	Refrigerated (preferred)	5 days	

Clinical & Interpretive

Clinical Information

A variety of different parasites may be found in specimens other than stool (eg, respiratory specimens, liver cyst aspirates or abscesses, and tissues). These parasites may include protozoa (microscopic unicellular eukaryotes) and helminths (worms). Infection is often asymptomatic but possible signs and symptoms of infection include cough, fever, bloody sputum, skin lesions, and abdominal pain.

Reference Values

Negative

If positive, organism identified

Interpretation

A positive result indicates the presence of the parasite but does not necessarily indicate that it is the cause of the patient's symptoms. Some strains of protozoa are nonpathogenic and some helminths cause little or no illness.

Cautions

This test is not appropriate for the detection of microfilariae, malaria, trypanosomes, or *Trichomonas vaginalis*.

Clinical Reference

1. Garcia L: Diagnostic Medical Parasitology. 6th ed. ASM Press; 2016
2. Pritt BS: Parasitology Benchtop Reference Guide. 2nd ed. CAP; 2017

Performance

Method Description

Different specimen sources may potentially harbor different types of parasites. A portion of the submitted specimen, depending on the type of specimen and what organism may be specifically suspected, may be examined by direct wet prep slide, tease or touch prep slides, concentrated for wet prep exam, or stained by trichrome stain, Ecostain, or Giemsa stain.(Unpublished Mayo method)

PDF Report

No

Day(s) Performed

Monday through Friday

Report Available

4 to 5 days

Specimen Retention Time

7 days

Performing Laboratory Location

Rochester

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

Test Classification

This test was developed, and its performance characteristics determined by Mayo Clinic in a manner consistent with CLIA requirements. This test has not been cleared or approved by the US Food and Drug Administration.

CPT Code Information

87015-Concentration (any type), for infectious agents (if applicable)

87209-Smear, primary source with interpretation; complex special stain (eg, trichrome, iron hematoxylin) for ova and parasites (If applicable)

87210-Wet mount for infectious agents (if applicable)

87207-Smear, primary source, with interpretation; special stain for inclusion bodies or intracellular parasites (if applicable)

LOINC® Information

Test ID	Test Order Name	Order LOINC® Value
OAPNS	Ova and Parasite, Microscopy, Varies	673-4

Result ID	Test Result Name	Result LOINC® Value
OAPNS	Ova and Parasite, Microscopy, Varies	673-4