

Overview

Useful For

This test will identify spirochete organisms in cases of intestinal spirochetosis, as well as cases of syphilis caused by infection with the spirochete *Treponema pallidum*.

Reflex Tests

| Test Id | Reporting Name            | Available Separately | Always Performed |
|---------|---------------------------|----------------------|------------------|
| IHTOI   | IHC Initial, Tech Only    | No                   | No               |
| IHTOA   | IHC Additional, Tech Only | No                   | No               |

Testing Algorithm

For the initial technical component only immunohistochemical (IHC) stain performed, the appropriate bill-only test ID will be reflexed and charged (IHTOI). For each additional technical component only IHC stain performed, an additional bill-only test ID will be reflexed and charged (IHTOA).

Method Name

Immunohistochemistry

NY State Available

Yes

Specimen

Specimen Type

TECHONLY

Ordering Guidance

This test includes only technical performance of the stain (no pathologist interpretation is performed). If diagnostic consultation by a pathologist is required order PATHC / Pathology Consultation.

Shipping Instructions

Attach the green pathology address label and the pink Immunostain Technical Only label included in the kit to the outside of the transport container.

Specimen Required

**Specimen Type:** Tissue

**Supplies:** Immunostain Technical Only Envelope (T693)

**Container/Tube:** Immunostain Technical Only Envelope

**Preferred:** Formalin-fixed, paraffin-embedded tissue block  
**Acceptable:** None

Digital Image Access

- 1. Information on accessing digital images of immunohistochemical (IHC) stains and the manual requisition form can be accessed through this website: <https://news.mayocliniclabs.com/ihc-stains/>
- 2. Clients ordering stains using a manual requisition form will not have access to digital images.
- 3. Clients wishing to access digital images must place the order for IHC stains electronically. Information regarding digital imaging can be accessed through this website: <https://news.mayocliniclabs.com/ihc-stains/#FAQ>

Forms

If not ordering electronically, complete, print, and send a [Immunohistochemical \(IHC\)/In Situ Hybridization \(ISH\) Stains Request](#) (T763) with the specimen.

Reject Due To

|   |        |
|---|--------|
| Wet/frozen tissue<br>Cytology smears<br>Nonformalin fixed tissue<br>Nonparaffin embedded tissue<br>Noncharged slides<br>ProbeOn slides<br>Snowcoat slides | Reject |
|---|--------|

Specimen Stability Information

| Specimen Type | Temperature         | Time | Special Container |
|---------------|---------------------|------|-------------------|
| TECHONLY      | Ambient (preferred) |      |                   |
|               | Refrigerated        |      |                   |

Clinical & Interpretive

Clinical Information

This test will identify spirochete organisms in cases of intestinal spirochetosis, as well as cases of syphilis caused by infection with the spirochete *Treponema pallidum*.

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**Interpretation**

This test does not include pathologist interpretation, only technical performance of the stain. If interpretation is required, order PATHC / Pathology Consultation for a full diagnostic evaluation or second opinion of the case.

The positive and negative controls are verified as showing appropriate immunoreactivity.

Interpretation of this test should be performed in the context of the patient's clinical history and other diagnostic tests by a qualified pathologist.

**Cautions**

Contamination and cross-reactivity with other microorganisms, including other spirochetes, may lead to nonspecific staining. Clinical and serologic correlation is recommended for diagnostic confirmation.

Age of a cut paraffin section can affect immunoreactivity. Stability thresholds vary widely among published literature and are antigen dependent. Best practice is for paraffin sections to be cut within 6 weeks.

**Clinical Reference**

1. Muller H, Eisendle K, Brauninger W, Kutzner H, Cerroni L, Zelger B. Comparative analysis of immunohistochemistry, polymerase chain reaction and focus-floating microscopy for the detection of *Treponema pallidum* in mucocutaneous lesions of primary, secondary and tertiary syphilis. *Br J Dermatol*. 2011;165(1):50-60
2. Theel ES, Katz SS, Pillay A. Molecular and direct detection tests for *Treponema pallidum* subspecies *pallidum*: a review of the literature, 1964-2017. *Clin Infect Dis*. 2020;71(Suppl 1):S4-S12. doi: 10.1093/cid/ciaa176
3. Fukuda H, Takahashi M, Kato K, Oharaseki T, Mukai H. Multiple primary syphilis on the lip, nipple-areola and penis: An immunohistochemical examination of *Treponema pallidum* localization using an anti-T. *pallidum* antibody. *J Dermatol*. 2015;42(2):515-517

**Performance****Method Description**

Immunohistochemistry on sections of paraffin-embedded tissue.(Unpublished Mayo method)

**PDF Report**

No

**Day(s) Performed**

Monday through Friday

**Report Available**

1 to 3 days

**Specimen Retention Time**

Until staining is complete.

Performing Laboratory Location

Mayo Clinic Laboratories - Rochester Main Campus

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](#).

Test Classification

This test has been cleared, approved, or is exempt by the US 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

88342-TC, primary  
88341-TC, if additional IHC

LOINC® Information

| Test ID | Test Order Name           | Order LOINC® Value |
|---------|---------------------------|--------------------|
| SPIRO   | Spirochete, IHC Tech Only | No LOINC Needed    |

| Result ID | Test Result Name          | Result LOINC® Value |
|-----------|---------------------------|---------------------|
| 619429    | Spirochete, IHC Tech Only | No LOINC Needed     |