

Overview

Useful For

Identification of *Treponema pallidum* in tissues

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 (IHC)

NY State Available

Yes

Specimen

Specimen Type

TECHONLY

Advisory Information

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

Supplies: Immunostain Technical Only Envelope (T693)

Specimen Type: Tissue

Container/Tube: Immunostain Technical Only Envelope

Preferred: 2 Unstained positively charged glass slide (25- x 75- x 1-mm) per test ordered; sections 4-microns thick

Acceptable: Formalin-fixed, paraffin-embedded (FFPE) tissue block

Digital Image Access

1. Information on accessing digital images of immunohistochemical (IHC) stains and the manual requisition form can be accessed through this website: www.mayocliniclabs.com/test-info/ihc/index.html
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: www.mayocliniclabs.com/test-info/ihc/faq.html

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; Cytology smears; Nonformalin fixed tissue; Nonparaffin embedded tissue; Noncharged slides; ProbeOn slides	Reject
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Specimen Stability Information

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

Clinical and Interpretive

Clinical Information

Syphilis is caused by infection with the spirochete *Treponema pallidum*. Transmission of *T pallidum* occurs via penetration of the spirochetes through mucosal membranes and abrasions on epithelial surfaces. This test will identify *T pallidum*, however it also cross-reacts with other spirochetes.

Interpretation

This test does not include pathologist interpretation; only technical performance of the stain is performed. If an 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 and documentation is retained at Mayo Clinic Rochester. If a control tissue is not included on the slide, a scanned image of the relevant quality control tissue is available upon request. Contact 855-516-8404.

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 fresh.

Clinical Reference

1. Muller H, Eisendle K, Brauning 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 Jul;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 Jun 24;71(Supplement_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 May;42(2):515-517

Performance**Method Description**

Immunohistochemistry on sections of paraffin-embedded tissue.(Unpublished Mayo method)

PDF Report

No

Day(s) and Time(s) Test Performed

Monday through Friday

Analytic Time

1 day

Maximum Laboratory Time

3 days

Specimen Retention Time

Until staining is complete.

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 was developed using an analyte specific reagent. Its performance characteristics were determined by Mayo Clinic in a manner consistent with CLIA requirements. This test has not been cleared or approved by the U.S. Food and Drug Administration.

CPT Code Information

88342-TC, primary

88341-TC, if additional IHC

LOINC® Information

Test ID	Test Order Name	Order LOINC Value
TREPE	Treponema Pallidum IHC, Tech Only	Order only;no result

Result ID	Test Result Name	Result LOINC Value
70883	Treponema Pallidum IHC, Tech Only	Bill only; no result