

Overview

**Useful For**  
Identification of normal and neoplastic B cells

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

**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**  
**Supplies:** Immunostain Technical Only Envelope (T693)  
**Specimen Type:** Tissue  
**Container/Tube:** Immunostains Technical Only Envelope  
**Preferred:** 2 Unstained positively charged glass slides (25- x 75- x 1-mm) per test ordered; sections 4-microns thick; B5

fixed, decalcified, paraffin-embedded bone marrow tissue.  
**Acceptable:** B5 fixed, decalcified, paraffin-embedded bone marrow 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: <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 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 & Interpretive

Clinical Information

CD19 is expressed by normal and neoplastic B cells but is not expressed by T cells, monocytes, or granulocytes. CD19 protein appears early during B-cell maturation and is found during all stages of B-cell maturation, including plasma cells. CD19 is useful as an additional marker of B cell lineage in leukemias and lymphomas. Expression of CD19 may be seen in some acute myeloid leukemias.

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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 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, call 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**

This test is optimized for use on B5-fixed, decalcified, paraffin-embedded bone marrow specimens.

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. Masir N, Marafioti T, Jones M, et al. Loss of CD19 expression in B-cell neoplasms. *Histopathology* 2006;48:239-246
2. Kirk CM, Lewin D, Lazarchick J, et al. Primary hepatic B-cell lymphoma of mucosa-associated lymphoid tissue. *Arch Pathol Lab Med* 1999;123:716-719
3. Magaki S, Hojat SA, Wei B, So A, Yong WH. An introduction to the performance of immunohistochemistry. *Methods Mol Biol.* 2019;1897:289-298. doi:10.1007/978-1-4939-8935-5\_25

**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 was developed and its performance characteristics determined by Mayo Clinic in a manner consistent with CLIA requirements. It has not been cleared or approved by the US 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
C19BM	Bone Marrow CD19 IHC, Tech Only	Order only;no result

Result ID	Test Result Name	Result LOINC® Value
603206	Bone Marrow CD19 IHC, Tech Only	Bill only; no result