

Semaphorin 3B (SEMA3B) Immunostain, Technical Component Only

#### Overview

#### **Useful For**

Aiding in the diagnosis of semaphorin 3B-associated membranous nephropathy

### **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: 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: <a href="https://news.mayocliniclabs.com/ihc-stains/">https://news.mayocliniclabs.com/ihc-stains/</a>
- 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



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imaging can be accessed through this website: <a href="https://news.mayocliniclabs.com/ihc-stains/#FAQ">https://news.mayocliniclabs.com/ihc-stains/#FAQ</a>

### **Forms**

If not ordering electronically, complete, print, and send a <u>Immunohistochemical (IHC)/In Situ Hybridization (ISH) Stains</u>
<u>Request</u> (T763) with the specimen.

## Reject Due To

Wet/frozen	Reject
tissue	
Cytology	
smears	
Nonformalin	
fixed tissue	
Nonparaffin	
embedded	
tissue	
Noncharged	
slides	
ProbeOn slides	

## Specimen Stability Information

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

## Clinical & Interpretive

### **Clinical Information**

Primary membranous nephropathy (MN) is an autoimmune disease of the kidney where antibodies target an antigen in the glomerular basement membrane resulting in kidney damage or failure. In up to 75% of primary membranous nephropathy cases PLA2R (phospholipase A2 receptor) and THSD7A (thrombospondin type-1 domain-containing 7A) are the target antigens. SEMA3B (semaphorin 3B)-associated MN is a very rare disease that accounts for only 1% to 3% of all MN specimens. SEMA3B-associated MN is observed mostly in pediatric patients and young adults.

### 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.



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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**

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. Sethi S, Debiec H, Madden B, et al: Semaphorin 3B-associated membranous nephropathy is a distinct type of disease predominantly present in pediatric patients. Kidney Int. 2020 Nov;98(5):1253-1264
- 2. Sethi S: Membranous nephropathy: a single disease or a pattern of injury resulting from different diseases. Clin Kidney
- J. 2021 Mar 26;14(10):2166-2169
- 3. Sethi S: New 'antigens' in membranous nephropathy. J Am Soc Nephrol. 2021 Feb;32(2):268-278

### **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

Rochester

### Fees & Codes

### **Fees**

- Authorized users can sign in to <u>Test Prices</u> for detailed fee information.
- Clients without access to Test Prices can contact <u>Customer Service</u> 24 hours a day, seven days a week.
- Prospective clients should contact their account representative. For assistance, contact <u>Customer Service</u>.



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## **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
	SEMA3	SEMA3B IHC, Tech Only	Order only;no result
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Result ID	Test Result Name	Result LOINC® Value
617056	SEMA3B IHC, Tech Only	Bill only; no result