Test Definition: THSIF

Thrombospondin Type 1 Domain Containing 7A (THSD7A), Immunofluorescence

Overview

Useful For
Diagnosis of thrombospondin type 1 domain-containing 7A (THSD7A)-associated membranous nephropathy

Method Name
Direct Immunofluorescence (DIF)

NY State Available
Yes

Specimen

Specimen Type
Special

Ordering Guidance
If additional interpretation/analysis is needed, request PATHC / Pathology Consultation along with this test and send the corresponding renal pathology light microscopy and immunofluorescence (IF) slides (or IF images on a CD), electron microscopy images (prints or CD), and the pathology report.

Necessary Information
A preliminary pathology report is required for testing to be performed. Send information with specimen. The laboratory will not reject testing if a reason for testing is not provided; however appropriate testing and interpretation may be compromised or delayed. If not provided, an appropriate indication for testing may be entered by Mayo Clinic Laboratories.

Specimen Required
Specimen Type: Kidney tissue
Preferred: 2 Unstained positively charged glass slide (25- x 75- x 1-mm) per test ordered; paraffin sections 3 to 4-microns thick
Acceptable: Formalin-fixed, paraffin-embedded (FFPE) kidney tissue block
Additional Information: Broken or cracked unstained slides will be rejected. Stained slides that were broken and repaired (ie, double mounted) at the client site will not be rejected, as, in most cases, they can still be reviewed under the microscope. However, due to the double mounting, digital scanning cannot be performed.

Forms
If not ordering electronically, complete, print, and send 1 of the following forms with the specimen:
-Kidney Transplant Test Request
-Renal Diagnostics Test Request (T830)

Specimen Minimum Volume
See Specimen Required

Reject Due To
Broken or cracked unstained slides are not compatible with the instrumentation used in our performing laboratories and will be rejected. Additional material may be requested. Attempts will be made to repair broken or cracked stained slides; however, if they are unable to be repaired (ie, shattered in transit), they will be rejected and discarded due to safety concerns.

Specimen Stability Information

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

Clinical & Interpretive

Clinical Information
Thrombospondin type 1 domain-containing 7A (THSD7A) is a target antigen in membranous nephropathy (MN) and is detected in approximately 3% to 5% of non- phospholipase A2 receptor (PLA2R)-associated MN patients. Differentiating THSD7A-associated MN from PLA2R-associated MN is critical as approximately 20% of patients with THSD7A-associated MN have solid malignancy suggesting that THSD7A-associated MN is more likely to be secondary to malignancy than PLA2R-associated MN.

Interpretation
Staining is interpreted and reported as negative or positive.

Cautions
Broken or cracked unstained slides are not compatible with the instrumentation used in our performing laboratories and will be rejected. Additional material may be requested.

Attempts will be made to repair broken or cracked stained slides; however, if they are unable to be repaired (ie, shattered in transit), they will be rejected and discarded due to safety concerns.

Clinical Reference
1. Hoxha E, Beck Jr LH, Wiech T et al. An indirect immunofluorescence method facilitates detection of thrombospondin type 1 domain-containing 7A-specific antibodies in membranous nephropathy. J Am Soc Nephrol. 2017;28:520-531
2. Larsen CP, Cossey LN, Bech LH. THSD7A staining of membranous glomerulopathy in clinical practice reveals cases with dual autoantibody positivity. Mod Pathol. 2016;29:421-426
3. Sharma SG, Larsen CP: Tissue staining for THSD7A in glomeruli correlates with serum antibodies in primary membranous nephropathy: a clinicopathological study. Mod Pathol. 2018;31(4):616-622

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Performance

Method Description
Direct immunofluorescence staining on sections of formalin-fixed, paraffin-embedded kidney tissue.(Unpublished Mayo method)

PDF Report
No

Day(s) Performed
Monday through Friday

Report Available
1 to 2 days

Specimen Retention Time
Until reported

Performing Laboratory Location
Mayo Clinical 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
88346-Primary IF
88350-If additional IF

LOINC® Information

Test ID	Test Order Name	Order LOINC® Value
THSIF	THSD7A Immunofluorescence	101116-2

Result ID	Test Result Name	Result LOINC® Value

605245	Interpretation	50595-8
606383	Participated in the Interpretation	No LOINC Needed
606384	Report electronically signed by	19139-5
606385	Addendum	35265-8
606386	Gross Description	22634-0
606387	Material Received	22633-2
606388	Disclaimer	62364-5
606389	Case Number	80398-1