

Fibronectin Glomerulopathy Confirmation,
Mass Spectrometry

Overview

Useful For

Aiding in the diagnosis of fibronectin glomerulopathy

Reflex Tests

Test Id	Reporting Name	Available Separately	Always Performed
MLCPC	Microdissection, Laser	No, (Bill Only)	No
	Capture		
MSPTC	Mass Spectrometry	No, (Bill Only)	No

Method Name

Liquid Chromatography Tandem Mass Spectrometry (LC-MS/MS)

NY State Available

Yes

Specimen

Specimen Type

Special

Necessary Information

Preliminary pathology report, history, and electron microscopy images are required.

Specimen Required

Supplies: Pathology Packaging Kit (T554)

Specimen Type: Formalin-fixed, paraffin-embedded kidney tissue block

Collection Instructions: Do not send fixed tissue slides. Testing can only be done on paraffin-embedded tissue blocks.

Reject Due To

Fixed tissue	Reject
slides	
Wet/frozen	
tissue	
Cytological	
smears	
Nonformalin	



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fixed tissue
Nonparaffin
embedded
tissue

Specimen Stability Information

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

Clinical & Interpretive

Clinical Information

Fibronectin glomerulopathy, also called glomerulopathy with fibronectin deposits 2 (GFND2), is a rare kidney disease characterized by large amounts of fibronectin deposits in the mesangium and subendothelial space of renal glomeruli. Liquid chromatography tandem mass spectrometry performed on microdissected glomeruli from patients with GFND2 demonstrates a unique proteomic profile. The presence of abnormal fibronectin deposits, in the appropriate clinical and pathological context, can be useful to establish a diagnosis of GFND2.

Interpretation

An interpretation will be provided.

Cautions

No significant cautionary statements

Clinical Reference

- 1. Lusco MA, Chen Y, Cheng H, et al. AJKD atlas of renal pathology: Fibronectin glomerulopathy. Am J Kidney Dis. 2017;70(5):e21-e22. doi:10.1053/j.ajkd.2017.09.001
- 2. Ishimoto I, Sohara E, Ito E, Okado T, Rai T, Uchida S. Fibronectin glomerulopathy. Clin Kidney J. 2013;6(5):513-515. doi:10.1093/ckj/sft097
- 3. Satoskar AA, Shapiro JP, Bott CN, et al. Characterization of glomerular diseases using proteomic analysis of laser capture microdissected glomeruli. Mod Path. 2012;25(5):709-721. doi:10.1038/modpathol.2011.205
- 4. Castelletti F, Donadelli R, Banterla F, et al. Mutations in FN1 cause glomerulopathy with fibronectin deposits. Proc Natl Acad Sci U S A. 2008;105(7):2538-2543. doi:10.1073/pnas.0707730105

Performance

Method Description

Affected areas are removed from paraffin-embedded tissues by laser microdissection. Protein digestion is performed,



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followed by liquid chromatography tandem mass spectrometry.(Unpublished Mayo method)

PDF Report

No

Day(s) Performed

Monday through Friday

Report Available

7 to 15 days

Specimen Retention Time

Until Reported

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>.

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

82542

88380

LOINC® Information

Test ID	Test Order Name	Order LOINC® Value
MSFNG	FNG Confirm, LC MS	65757-7

Result ID	Test Result Name	Result LOINC® Value
615306	Interpretation	50595-8
615307	Participated in the Interpretation	No LOINC Needed
615308	Report electronically signed by	19139-5
615309	Material Received	81178-6
615310	Disclaimer	62364-5



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615311	Case Number	80398-1
617017	Gross Description	22634-0
617018	Addendum	35265-8