MAYO CLINIC LABORATORIES

Test Definition: MSFNG

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 Capture	No, (Bill Only)	No
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.

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)

Reject Due To

Fixed tissue slides	Reject

Wet/frozen tissue Cytological smears Nonformalin fixed tissue Nonparaffin embedded tissue	

Specimen Stability Information

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

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

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Performance

Method Description
Affected areas are removed from paraffin-embedded tissues by laser microdissection. Protein digestion is performed, 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
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
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
615311	Case Number	80398-1
617017	Gross Description	22634-0
617018	Addendum	35265-8