



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

- 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
- 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
- Satoskar AA, Shapiro JP, Bott CN, et al. Characterization of glomerular diseases using proteomic analysis of laser capture microdissected glomeruli. *Mod Pathol.* 2012;25(5):709-721. doi:10.1038/modpathol.2011.205
- 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, 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
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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