

Overview**Useful For**

Detecting septin-7 IgG in cerebrospinal fluid (CSF) specimens

Reporting an end titer result from CSF specimens

Testing Algorithm

If the indirect immunofluorescence pattern suggests septin-7, then septin-7 antibody cell-binding assay and this test will be performed at an additional charge.

Method Name

Only orderable as a reflex. For more information see:

- ENC2 / Encephalopathy, Autoimmune/Paraneoplastic Evaluation, Spinal Fluid
- MDC2 / Movement Disorder, Autoimmune/Paraneoplastic Evaluation, Spinal Fluid
- MAC1 / Autoimmune Myelopathy/Paraneoplastic Evaluation, Spinal Fluid

Indirect Immunofluorescence Assay (IFA)

NY State Available

Yes

Specimen**Specimen Type**

CSF

Specimen Required

Only orderable as a reflex. For more information see:

- ENC2 / Encephalopathy, Autoimmune /Paraneoplastic Evaluation, Spinal Fluid
- MDC2 / Movement Disorder, Autoimmune /Paraneoplastic Evaluation, Spinal Fluid
- MAC1 / Autoimmune Myelopathy /Paraneoplastic Evaluation, Spinal Fluid

Container/Tube: Sterile vial

Specimen Volume: 1.5 mL

Specimen Minimum Volume

See Specimen Required

Reject Due To

Gross hemolysis	Reject
Gross lipemia	Reject
Gross icterus	Reject

Specimen Stability Information

Specimen Type	Temperature	Time	Special Container
CSF	Refrigerated (preferred)	28 days	
	Ambient	72 hours	
	Frozen	28 days	

Clinical & Interpretive

Clinical Information

Neurological phenotypes for septin-7 IgG positive patients include encephalopathy, myelopathy, encephalomyelopathy, painful myelopolyradiculopathy, and episodic ataxia. Psychiatric symptoms are also common with encephalopathic symptoms. Septin-7 IgG is also associated with cancer and positive response to immunotherapy.

Reference Values

Only orderable as a reflex. For more information see:
-ENC2 / Encephalopathy, Autoimmune /Paraneoplastic Evaluation, Spinal Fluid
-MDC2 / Movement Disorder, Autoimmune /Paraneoplastic Evaluation, Spinal Fluid
-MAC1 / Autoimmune Myelopathy /Paraneoplastic Evaluation, Spinal Fluid

<1:2

Interpretation

Seropositivity for septin antibodies by immunofluorescence is consistent with a diagnosis of autoimmune disease of the central nervous system. Cell-binding assay testing for septin-7 IgG is required to confirm the diagnosis.

Cautions

Negative results for septin antibodies do not exclude neurological autoimmunity or cancer.

Clinical Reference

Honorat JA, Miske R, Scharf M, et al: 416. Neuronal septin autoimmunity: Differentiated serological profiles and clinical findings. Ann Neurol. 2020 Oct;88(Suppl 25):S55. Abstract

Performance

Method Description

The patient's specimen is tested by a standardized immunofluorescence assay that uses a composite frozen section of mouse cerebellum, kidney, and gut tissues. After incubation with the specimen and washing, fluorescein-conjugated goat-antihuman IgG is applied. Neuron-specific autoantibodies are identified by their characteristic fluorescence staining patterns. Specimens that are scored positive for any neuronal nuclear or cytoplasmic autoantibody are titrated. Interference by coexisting non-neuron-specific autoantibodies can usually be eliminated by serologic absorption.(Honorat JA, Komorowski L, Josephs KA, et al. IgLON5 antibody: Neurological accompaniments and outcomes in 20 patients. Neurol Neuroimmunol Neuroinflamm. 2017;4[5]:e385. Published 2017 Jul 18. doi:10.1212/NXI.0000000000000385)

PDF Report

No

Day(s) Performed

Monday through Sunday

Report Available

5 to 10 days

Specimen Retention Time

2 days

Performing Laboratory Location

Mayo Clinic 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

86256

LOINC® Information

Test ID	Test Order Name	Order LOINC® Value
SP7TC	Septin-7 IFA Titer, CSF	101457-0

Test Definition: SP7TC

Septin-7 Antibody, Tissue
Immunofluorescence Titer, Spinal Fluid

Result ID	Test Result Name	Result LOINC® Value
616116	Septin-7 IFA Titer, CSF	101457-0