

Overview

Useful For

Detecting septin-7 IgG in serum specimens

Reporting an end titer result from serum specimens

Testing Algorithm

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

Method Name

Only orderable as a reflex. For more information see:  
-ENS2 / Encephalopathy, Autoimmune/Paraneoplastic Evaluation, Serum  
-MDS2 / Movement Disorder, Autoimmune/Paraneoplastic Evaluation, Serum  
-MAS1 / Myelopathy, Autoimmune/Paraneoplastic Evaluation, Serum

Indirect Immunofluorescence Assay (IFA)

NY State Available

Yes

Specimen

Specimen Type

Serum

Specimen Required

Only orderable as a reflex. For more information see:  
-ENS2 / Encephalopathy, Autoimmune/Paraneoplastic Evaluation, Serum  
-MDS2 / Movement Disorder, Autoimmune/Paraneoplastic Evaluation, Serum  
-MAS1 / Myelopathy, Autoimmune/Paraneoplastic Evaluation, Serum

Specimen Minimum Volume

See Specimen Required

Reject Due To

Gross hemolysis	Reject
Gross lipemia	Reject

Gross icterus	Reject
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Specimen Stability Information

Specimen Type	Temperature	Time	Special Container
Serum	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. Positive response to immunotherapy.

Reference Values

Only orderable as a reflex. For more information see:  
-ENS2 / Encephalopathy, Autoimmune/Paraneoplastic Evaluation, Serum  
-MDS2 / Movement Disorder, Autoimmune/Paraneoplastic Evaluation, Serum  
-MAS1 / Myelopathy, Autoimmune/Paraneoplastic Evaluation, Serum

<1:240

Interpretation

Seropositivity for septin antibodies by indirect immunofluorescence assay 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
SP7TS	Septin-7 IFA Titer, S	101456-2

Result ID	Test Result Name	Result LOINC® Value
616115	Septin-7 IFA Titer, S	101456-2