Test Definition: SP7CS

Septin-7 Antibody, Cell-Binding Assay, Serum

Overview

Useful For
Detecting septin-7 IgG by cell-binding assay using serum specimens

Testing Algorithm
If the indirect immunofluorescence (IFA) pattern suggests septin-7, then this test and septin-7 antibody IFA titer 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

Cell-Binding Assay (CBA)

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

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

Negative

Interpretation
Seropositivity for septin antibodies by immunofluorescence is consistent with a diagnosis of autoimmune disease of the central nervous system. Cell-binding assay (CBA) testing for septin-7 IgG is required to confirm the diagnosis. Seropositivity for septin-7 IgG by CBA confirms a diagnosis of autoimmune disease of the central nervous system. A paraneoplastic cause should be considered in patients with septin-7 IgG.

Cautions
Negative results for septin-7 IgG by cell-binding assay 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
Patient specimen is applied to a composite slide containing transfected and nontransfected HEK-293 cells. After incubation and washing, fluorescein-conjugated goat-antihuman IgG is applied to detect the presence of patient IgG binding.(Package insert: IIFT: Neurology Mosaics, Instructions for the indirect immunofluorescence test. EUROIMMUN; FA_112d-1_A_UK_C13, 02/2019)

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
86255

LOINC® Information

Test ID	Test Order Name	Order LOINC® Value
SP7CS	Septin-7 CBA, S	101467-9

Result ID	Test Result Name	Result LOINC® Value
615873	Septin-7 CBA, S	101467-9