

Overview

Useful For

Detecting septin-5 IgG in serum specimens

Reporting an end titer result from serum specimens

Testing Algorithm

If the indirect immunofluorescence pattern suggests septin-5, then septin-5 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 MDS2 / Movement Disorder, 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 MDS2 / Movement Disorder, Autoimmune/Paraneoplastic Evaluation, Serum.

Collection Container/Tube:

Preferred: Red top

Acceptable: Serum gel

Submission Container/Tube: Plastic vial

Specimen Volume: 1 mL

Collection Instructions: Centrifuge and aliquot serum into a plastic vial.

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

Septin-5 IgG is a biomarker of a rapidly progressive, but treatable, form of autoimmune cerebellar ataxia. Patients present with subacute onset of cerebellar ataxia with prominent eye movement symptoms (oscillopsia or vertigo). Improvement may occur after immunotherapy.

Reference Values

Only orderable as a reflex. For more information see MDS2 / Movement Disorder, Autoimmune/Paraneoplastic Evaluation, Serum.

<1:240

Interpretation

Seropositivity for septin antibodies by indirect immunofluorescence is consistent with a diagnosis of autoimmune disease of the central nervous system. Cell-binding assay testing for septin-5 IgG is required to confirm the diagnosis.

Cautions

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

Clinical Reference

1. Honorat JA, Lopez-Chiriboga AS, Kryzer TJ, et al: Autoimmune septin-5 cerebellar ataxia. *Neurol Neuroimmunol Neuroinflamm*. 2018 Jul 9;5(5):e474
2. 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 |
|---------|-----------------------|--------------------|
| SP5TS | Septin-5 IFA Titer, S | 101458-8 |

| Result ID | Test Result Name | Result LOINC® Value |
|-----------|-----------------------|---------------------|
| 616113 | Septin-5 IFA Titer, S | 101458-8 |