Test Definition: APBTS

Adaptor Protein 3 Beta2 (AP3B2) Antibody, Tissue Immunofluorescence Titer, Serum

Overview

Useful For

The differential diagnosis of patients presenting with mixed cerebellar and sensory ataxia and myeloneuropathy

Reporting an end titer result from serum specimens

Testing Algorithm

If the indirect immunofluorescence (IFA) pattern suggests AP3B2 (adaptor protein 3 beta2)-IgG, then AP3B2 antibody cell-binding assay (CBA) and this test will be performed at an additional charge.

Method Name

Only orderable as a reflex. For more information see:
-AIAES / Axonal Neuropathy, Autoimmune/Paraneoplastic Evaluation, Serum
-DYS2 / Dysautonomia, Autoimmune/Paraneoplastic Evaluation, Serum
-GID2 / Gastrointestinal Dysmotility, 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:
-AIAES / Axonal Neuropathy, Autoimmune/Paraneoplastic Evaluation, Serum
-DYS2 / Dysautonomia, Autoimmune/Paraneoplastic Evaluation, Serum
-GID2 / Gastrointestinal Dysmotility, 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

AP3B2 (adaptor protein 3 beta2)-IgG is a marker of an autoimmune disorder unified by gait instability as the predominant neurologic presentation. Patients present with either cerebellar, dorsal column, or sensory neuronal dysfunction. Clinical improvement following treatment has been reported. AP3B2 autoimmunity appears rare, is accompanied by ataxia (sensory or cerebellar), and is potentially treatable.

Reference Values

Only orderable as a reflex. For more information see:
-AIAES / Axonal Neuropathy, Autoimmune/Paraneoplastic Evaluation, Serum
-DYS2 / Dysautonomia, Autoimmune/Paraneoplastic Evaluation, Serum
-GID2 / Gastrointestinal Dysmotility, Autoimmune/Paraneoplastic Evaluation, Serum
-MAS1 / Myelopathy, Autoimmune/Paraneoplastic Evaluation, Serum

<1:240

Interpretation

A positive result supports a diagnosis of neurological autoimmunity. Neurological phenotypes encountered include cerebellar ataxia, spinocerebellar ataxia, myelopathy, sensory neuronopathy and autonomic neuropathy. Neurological stabilization or improvement may occur with immune therapy.

Cautions

A negative result does not exclude neurological autoimmunity or cancer.

Clinical Reference

Honorat JA, Lopez-Chiriboga AS, Kryzer, TJ, et al: Autoimmune gait disturbance accompanying adaptor protein-3B2-IgG. Neurology. 2019 Sep 3;93(10):e954-e963

Test Definition: APBTS

Adaptor Protein 3 Beta2 (AP3B2) Antibody, Tissue Immunofluorescence Titer, Serum

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

28 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

MAYO CLINIC LABORATORIES

Test Definition: APBTS

Adaptor Protein 3 Beta2 (AP3B2) Antibody, Tissue Immunofluorescence Titer, Serum

Test ID	Test Order Name	Order LOINC® Value
APBTS	AP3B2 IFA Titer, S	101908-2

Result ID	Test Result Name	Result LOINC® Value
616109	AP3B2 IFA Titer, S	101908-2