

Overview

Useful For

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

Evaluating AP3B2 (adaptor protein 3 beta2)-IgG by cell-binding assay using serum specimens

Testing Algorithm

If the indirect immunofluorescence (IFA) pattern suggests AP3B2 (adaptor protein 3 beta2), then this test and AP3B2 antibody IFA titer 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
- MDS2 / Movement Disorder, 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:

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- DYS2 / Dysautonomia, Autoimmune/Paraneoplastic Evaluation, Serum
- GID2 / Gastrointestinal Dysmotility, Autoimmune/Paraneoplastic Evaluation, Serum
- MAS1 / Myelopathy, Autoimmune/Paraneoplastic Evaluation, Serum
- MDS2 / Movement Disorder, 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

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- AIAES / Axonal Neuropathy, Autoimmune/Paraneoplastic Evaluation, Serum
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Negative

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.

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

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

86255

LOINC® Information

| Test ID | Test Order Name | Order LOINC® Value |
|---------|-----------------|--------------------|
|---------|-----------------|--------------------|

| | | |
|-------|--------------|----------|
| APBCS | AP3B2 CBA, S | 101907-4 |
|-------|--------------|----------|

| Result ID | Test Result Name | Result LOINC® Value |
|-----------|------------------|---------------------|
| 615861 | AP3B2 CBA, S | 101907-4 |