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**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:

- 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

**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
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- MDS2 / Movement Disorder, Autoimmune/Paraneoplastic Evaluation, Serum

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
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## Test Definition: APBCS

Adaptor Protein 3 Beta2 (AP3B2) Antibody,  
Cell-Binding Assay, Serum

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