

Overview

Useful For

Evaluating neurochondrin-IgG by cell-binding assay using spinal fluid from patients presenting with cerebellar and brainstem syndrome

Testing Algorithm

If the indirect immunofluorescence (IFA) pattern suggests neurochondrin, then this test and neurochondrin antibody IFA titer will be performed at an additional charge.

Method Name

Only orderable as a reflex. For more information see:

- DMC2 / Dementia, Autoimmune/Paraneoplastic Evaluation, Spinal Fluid
- ENC2 / Encephalopathy, Autoimmune/Paraneoplastic Evaluation, Spinal Fluid
- EPC2 / Epilepsy, Autoimmune/Paraneoplastic Evaluation, Spinal Fluid
- MAC1 / Myelopathy, Autoimmune/Paraneoplastic Evaluation, Spinal Fluid
- MDC2 / Movement Disorder, Autoimmune/Paraneoplastic Evaluation, Spinal Fluid
- PCDEC / Pediatric Autoimmune Encephalopathy/CNS Disorder Evaluation, Spinal Fluid

Cell-Binding Assay (CBA)

NY State Available

Yes

Specimen

Specimen Type

CSF

Specimen Required

Only orderable as a reflex. For more information see:

- DMC2 / Dementia, Autoimmune/Paraneoplastic Evaluation, Spinal Fluid
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- EPC2 / Epilepsy, Autoimmune/Paraneoplastic Evaluation, Spinal Fluid
- MAC1 / Myelopathy, Autoimmune/Paraneoplastic Evaluation, Spinal Fluid
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Container/Tube: Sterile vial

Specimen Volume: 1.5 mL

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
CSF	Refrigerated (preferred)	28 days	
	Ambient	72 hours	
	Frozen	28 days	

Clinical & Interpretive

Clinical Information

Neurochondrin is a neuronal target antigen in autoimmune cerebellar degeneration. Patients positive for neurochondrin-IgG present with a subacute to chronic cerebellar and brainstem syndrome. Patients respond to long-term immunosuppressive treatment with clinical stabilization or improvement.

Reference Values

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Negative

Interpretation

A positive result supports a diagnosis of central nervous system autoimmunity. Typical neurological phenotypes encountered include cerebellar ataxia and brainstem encephalitis. A paraneoplastic basis should be considered (uterine cancer in women) though cancers are generally not detected. Neurological stabilization or improvement may occur with immune therapy.

Cautions

A negative result does not exclude neurological autoimmunity or cancer.

### Clinical Reference

Shelly S, Kryzer TJ, Komorowski L, et al: Neurochondrin neurological autoimmunity. Neurol Neuroimmunol Neuroinflamm. 2019 Sep 11;6(6):e612

### 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, Lubeck, Germany, 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

Test Definition: NCDCC

Neurochondrin Antibody, Cell-Binding Assay,  
Spinal Fluid

86255

LOINC® Information

Test ID	Test Order Name	Order LOINC® Value
NCDCC	Neurochondrin CBA, CSF	101449-7

Result ID	Test Result Name	Result LOINC® Value
615864	Neurochondrin CBA, CSF	101449-7