



## Test Definition: NCDTC

Neurochondrin Antibody, Tissue  
Immunofluorescence Titer, Spinal Fluid

### Overview

#### Useful For

Detecting neurochondrin-IgG in spinal fluid (CSF) from patients presenting with cerebellar and brainstem syndrome

Reporting an end titer result from CSF specimens

#### Testing Algorithm

If the indirect immunofluorescence pattern suggests neurochondrin, then neurochondrin 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:

- 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

Indirect Immunofluorescence Assay (IFA)

#### 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
- 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

**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**

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

<1:2

**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), although 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. doi: 10.1212/NXI.0000000000000612

**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
NCDTC	Neurochondrin IFA Titer, CSF	101453-9

Result ID	Test Result Name	Result LOINC® Value
616112	Neurochondrin IFA Titer, CSF	101453-9