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

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-EPC2 / Epilepsy, Autoimmune/Paraneoplastic Evaluation, Spinal Fluid
-MAC1 / Myelopathy, Autoimmune/Paraneoplastic Evaluation, Spinal Fluid
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-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
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<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
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.

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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