MAYO CLINIC LABORATORIES

Test Definition: NCDTS

Neurochondrin Antibody, Tissue Immunofluorescence Titer, Serum (Non-Orderable)

Overview

Useful For

Only orderable as a reflex. For more information see:
DMS2 / Dementia, Autoimmune/Paraneoplastic Evaluation, Serum
ENS2 / Encephalopathy, Autoimmune/Paraneoplastic Evaluation, Serum
EPS2 / Epilepsy, Autoimmune/Paraneoplastic Evaluation, Serum
MAS1 / Myelopathy, Autoimmune/Paraneoplastic Evaluation, Serum
MDS2 / Movement Disorder, Autoimmune/Paraneoplastic Evaluation, Serum
PCDES / Pediatric Autoimmune Encephalopathy/CNS Disorder Evaluation, Serum

Detecting neurochondrin-IgG in serum from patients presenting with cerebellar and brainstem syndrome

Reporting an end titer result from serum 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:
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-ENS2 / Encephalopathy, Autoimmune/Paraneoplastic Evaluation, Serum
-EPS2 / Epilepsy, Autoimmune/Paraneoplastic Evaluation, Serum
-MAS1 / Myelopathy, Autoimmune/Paraneoplastic Evaluation, Serum
-MDS2 / Movement Disorder, Autoimmune/Paraneoplastic Evaluation, Serum
-PCDES / Pediatric Autoimmune Encephalopathy/CNS Disorder Evaluation, Serum

Indirect Immunofluorescence Assay (IFA)

NY State Available

Yes

Specimen

Specimen Type

Serum

Specimen Required

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-ENS2 / Encephalopathy, Autoimmune/Paraneoplastic Evaluation, Serum
-EPS2 / Epilepsy, Autoimmune/Paraneoplastic Evaluation, Serum
-MAS1 / Myelopathy, Autoimmune/Paraneoplastic Evaluation, Serum
-MDS2 / Movement Disorder, Autoimmune/Paraneoplastic Evaluation, Serum
-PCDES / Pediatric Autoimmune Encephalopathy/CNS Disorder 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

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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-ENS2 / Encephalopathy, Autoimmune/Paraneoplastic Evaluation, Serum
-EPS2 / Epilepsy, Autoimmune/Paraneoplastic Evaluation, Serum
-MAS1 / Myelopathy, Autoimmune/Paraneoplastic Evaluation, Serum
-MDS2 / Movement Disorder, Autoimmune/Paraneoplastic Evaluation, Serum
-PCDES / Pediatric Autoimmune Encephalopathy/CNS Disorder Evaluation, Serum

<1:240

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

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

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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
NCDTS	Neurochondrin IFA Titer, S	101454-7

Result ID	Test Result Name	Result LOINC® Value
616111	Neurochondrin IFA Titer, S	In Process