MAYO CLINIC LABORATORIES

Test Definition: PDEIS

Phosphodiesterase 10A (PDE10A) IgG, Tissue Immunofluorescence, Serum

Overview

Useful For

Detecting phosphodiesterase 10A (PDE10A)-IgG in serum specimens

Evaluation of autoimmune/paraneoplastic neurological syndromes among patients presenting with movement disorders and encephalopathy

Testing Algorithm

If the indirect immunofluorescence (IFA) pattern suggests phosphodiesterase 10A (PDE10A) IgG, then the PDE10A antibody IFA titer will be performed at an additional charge.

Method Name

Only orderable as part of a profile. For more information see:
ENS2 / Encephalopathy, Autoimmune/Paraneoplastic Evaluation, Serum
DMS2 / Dementia, Autoimmune/Paraneoplastic Evaluation, Serum
EPS2 / Epilepsy, Autoimmune/Paraneoplastic Evaluation, Serum
MDS2 / Movement Disorder, Autoimmune/Paraneoplastic Evaluation, Serum

Indirect Immunofluorescence Assay (IFA)

NY State Available

Yes

Specimen

Specimen Type

Serum

Specimen Required

Only orderable as part of a profile. For more information see:
ENS2 / Encephalopathy, Autoimmune/Paraneoplastic Evaluation, Serum
DMS2 / Dementia, Autoimmune/Paraneoplastic Evaluation, Serum
EPS2 / Epilepsy, Autoimmune/Paraneoplastic Evaluation, Serum
MDS2 / Movement Disorder, Autoimmune/Paraneoplastic Evaluation, Serum

Specimen Minimum Volume

1 mL

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

Phosphodiesterase 10A (PDE10A) is a marker of paraneoplastic neurological autoimmunity in patients presenting with movement disorders, encephalopathy, and often, cancer.

Reference Values

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ENS2 / Encephalopathy, Autoimmune/Paraneoplastic Evaluation, Serum
DMS2 / Dementia, Autoimmune/Paraneoplastic Evaluation, Serum
EPS2 / Epilepsy, Autoimmune/Paraneoplastic Evaluation, Serum
MDS2 / Movement Disorder, Autoimmune/Paraneoplastic Evaluation, Serum

Negative

Interpretation

A positive result is consistent with phosphodiesterase 10A (PDE10A) autoimmunity that manifests with autoimmune movement disorders or encephalitis. A paraneoplastic cause should be considered.

Cautions

A negative result does not exclude the presence of neurological autoimmunity or cancer. The use of immunosuppressive therapy prior to sample collection may negatively impact the sensitivity of this assay.

Clinical Reference

Zekeridou A, Kryzer T, Guo Y, et al. Phosphodiesterase 10A IgG: A novel biomarker of paraneoplastic neurologic autoimmunity. Neurology. 2019;93(8):e815-e822. doi:10.1212/WNL.0000000000007971

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

86255

LOINC® Information

Test ID	Test Order Name	Order LOINC® Value
PDEIS	PDE10A Ab IFA, S	103842-1

Test Definition: PDEIS

Phosphodiesterase 10A (PDE10A) IgG, Tissue Immunofluorescence, Serum

Result ID	Test Result Name	Result LOINC® Value
620068	PDE10A Ab IFA, S	103842-1