



## 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

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

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            |