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**Lab Dept:** Other Fluids

**Test Name:** PEDIATRIC AUTOIMMUNE CNS DISORDERS  
EVALUATION, CSF (< 18 y.o.)

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**General Information**

**Lab Order Codes:** PCDEC

**Synonyms:** Peds Autoimmune Central Nervous System Eval, Spinal Fluid

**CPT Codes:** 86255 x10 – Fluorescent noninfectious agent, antibody screen, each antibody  
86341 – Islet cell antibody

Possible reflex testing (at an additional charge):

84182 x6 – Western blot, with interpretation and report, each  
86255 x10 – Fluorescent noninfectious agent, antibody screen, each antibody  
86256 x 7 – Fluorescent noninfectious agent, titer, each antibody

**Test Includes:**

If the indirect immunofluorescence assay (IFA) pattern suggests antineuronal nuclear antibodies (ANNA)-1, then ANNA-1 immunoblot, ANNA-1 IFA titer and ANNA-2 immunoblot will be performed at an additional charge.

If the IFA pattern suggests Purkinje cell cytoplasmic antibody (PCA)-Tr, then PCA-Tr immunoblot and PCA-Tr IFA titer will be performed at an additional charge.

If N-methyl-D-aspartate receptor (NMDA-R) antibody CBA is positive, then NMDA-R IFA titer will be performed at an additional charge.

If gamma-aminobutyric acid B receptor (GABA-B-R) antibody CBA is positive, then GABA-B-R IFA titer will be performed at an additional charge.

If the IFA pattern suggests dipeptidyl-peptidase-like protein-6 (DPPX) antibody, then DPPX antibody CBA and DPPX IFA titer will be performed at an additional charge.

If the IFA pattern suggests metabotropic glutamate receptor 1 (mGluR1) antibody, then mGluR1 antibody CBA and mGluR1 IFA titer will be performed at an additional charge.

If the IFA pattern suggests glial fibrillary acidic protein (GFAP) antibody, then GFAP antibody CBA and GFAP IFA titer will be performed at an additional charge.

If the neuromyelitis optica/aquaporin-4-IgG (NMO/AQP4-IgG) fluorescence-activated cell sorting (FACS) screen assay requires further investigation,

then NMO/AQP4-IgG FACS titration assay will be performed at an additional charge.

If the IFA pattern suggests neurochondrin antibody, then neurochondrin antibody CBA and neurochondrin IFA titer will be performed at an additional charge.

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### ***Logistics***

**Test indications:** This test is for patients less than 18 years of age. For patients 18 years of age or older, order Encephalopathy Autoimmune CNS Disorders Eval, CSF (ENC2).

Evaluating children with autoimmune central nervous system disorders using spinal fluid specimens.

**Lab Testing Sections:** Other Fluids - Sendouts

**Referred to:** Mayo Clinic Laboratories – (Mayo test: PCDEC)

**Phone Numbers:** MIN Lab: 612-813-6280

STP Lab: 651-220-6550

**Test Availability:** Daily, 24 hours

**Turnaround Time:** 8 – 12 days

**Special Instructions:** N/A

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### ***Specimen***

**Specimen Type:** CSF

**Container:** Screw-capped, sterile, plastic vial

**Draw Volume:** 4.0 mL (Minimum: 2.0 mL) CSF

**Processed Volume:** Same as Draw Volume

**Collection:** Routine CSF collection, collection vial #1 preferred (any vial accepted)

**Special Processing:** Lab Staff: Use sterile technique to aliquot 4.0 (min: 2.0) mL CSF. Store and ship refrigerated in plastic vial.

Specimen stable refrigerated (preferred) or frozen for 28 days, ambient for 72 hours

**Patient Preparation:** None

**Sample Rejection:**

Mislabeled or unlabeled specimens; gross hemolysis, lipema or icterus

**Interpretive****Reference Range:**

| Antibody:                          | Reference Range:   |
|------------------------------------|--------------------|
| Anti-Neuronal Nuclear Ab Type 1    | Negative           |
| CASPR-2 IgG CBA                    | Negative           |
| DPPX Ab IFA                        | Negative           |
| GABA-B-R Ab CBA                    | Negative           |
| GAD65 Ab Assay                     | < or = 0.02 nmol/L |
| GFAP IFA                           | Negative           |
| mGluR1 Ab IFA                      | Negative           |
| LGI1-IgG CGA                       | Negative           |
| Neurochondrin IFA, CSF             | Negative           |
| NMDA-R Ab CBA                      | Negative           |
| NMO/AQP4 FACS                      | Negative           |
| Peds Autoimmune CNS Interp, CSF    | N/A                |
| Purkinje Cell Cytoplasm Ab Type Tr | Negative           |
| ANNA-1 Immunoblot                  | Negative           |
| ANNA-1 Titer                       | <1:2               |
| ANNA-2 Immunoblot                  | Negative           |
| DPPX Ab CBA                        | Negative           |
| DPPX Ab IFA Titer                  | <1:2               |
| GABA-B-R Ab IF Titer Assay         | <1:2               |
| GFAP CBA                           | Negative           |

**Reflex Reference Ranges:**

|                          |          |
|--------------------------|----------|
| GFAP IFA Titer           | <1:2     |
| mGluR1 Ab CBA            | Negative |
| mGluR1 Ab IFA Titer      | <1:2     |
| Neurochondrin CBA        | Negative |
| Neurochondrin IFA Titer  | <1:2     |
| NMDA-R Ab IF Titer Assay | <1:2     |
| NMO/AQP4 FACS Titer      | <1:2     |
| PCA-Tr Titer             | <1:2     |
| PCA-Tr Immunoblot        | Negative |

**Limitations:** Negative results do not exclude a diagnosis of an autoimmune central nervous system disorder.

**Methodology:** Immunofluorescence assay (IFA)  
Cell-binding assay (CBA)  
Fluorescence activated cell sorting assay (FACS)  
Radioimmunoassay (RIA)  
Immunoblot (IB)

**References:** [Mayo Clinic Laboratories](#) (February 2023)

**Updates:** 2/17/2023: Updated age limits in Test Indications, specimen stability added  
4/17/2023: Reference ranges and reflex testing updated