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**Lab Dept:** Serology

**Test Name:** CNS DEMYLENATING DISEASE EVALUATION

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**General Information**

**Lab Order Codes:** CDS1

**Synonyms:** N/A

**CPT Codes:** 86255 x2 – Fluorescent noninfectious agent antibody  
86256 x2 – Fluorescent noninfectious agent antibody (if appropriate)

**Test Includes:** NMO/AQP4 FACS and MOG FACS reported as positive or negative plus interpretation.

- When the results of this assay require further evaluation of neuromyelitis optica (NMO)/Aquaporin-4-IgG, the neuromyelitis optica (NMO)/aquaporin-4-IgG titer will be performed at an additional charge.
  - When the results of this assay require further evaluation of myelin oligodendrocyte glycoprotein (MOG-IgG1), the MOG IgG1 titer will be performed at an additional charge.
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**Logistics**

**Test indications:**

- Diagnosis of inflammatory demyelinating diseases (IDDs) with similar phenotype to neuromyelitis optica spectrum disorder (NMOSD), including optic neuritis (single or bilateral) and transverse myelitis
- Diagnosis of autoimmune myelin oligodendrocyte glycoprotein (MOG)-opathy
- Diagnosis of neuromyelitis optica (NMO)
- Distinguishing NMOSD, acute disseminated encephalomyelitis (ADEM), optic neuritis, and transverse myelitis from multiple sclerosis early in the course of disease.
- Diagnosis of ADEM
- Prediction of a relapsing disease course

**Lab Testing Sections:** Serology Sendouts

**Referred to:** Mayo Clinic Laboratories (Mayo Test: CDS1)

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

STP Lab: 651-220-6550

**Test Availability:** Daily, 24 hours

**Turnaround Time:** 7 – 10 days, performed Monday, Tuesday, Thursday

**Special Instructions:** See [Patient Preparation](#)

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### ***Specimen***

**Specimen Type:** Blood

**Container:** SST or Red No Gel

**Draw Volume:** 9 mL (minimum: 6 mL) blood

**Processed Volume:** 3 mL (minimum: 2 mL) serum

**Collection:** Routine blood collection

**Special Processing:** Lab Staff:  
Allow blood to clot. Centrifuge specimen, remove serum aliquot into screw top vial. Store and ship at refrigerated temperatures.

**Patient Preparation:** For optimal antibody detection, it is recommend drawing the blood specimen before initiation of immunosuppressant medication.

**Sample Rejection:** Gross hemolysis; gross lipemia; gross icterus; mislabeled or unlabeled specimens

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### ***Interpretive***

**Reference Range:** NMO/AQP4 FACS: Negative  
MOG FACS: Negative  
An Interpretive report will be provided.

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- When the results of this assay require further evaluation of myelin oligodendrocyte glycoprotein (MOG-IgG1), the MOG IgG1 titer will be performed at an additional charge.

**Critical Values:** N/A

**Limitations:** Aquaporin-4 (AQP4)-IgG and myelin oligodendrocyte glycoprotein (MOG)-IgG antibodies may drop below detectable levels in setting of therapies for acute attack (IV methylprednisolone or plasmapheresis) or attack prevention (immunosuppressants).

**Methodology:** Flow cytometry

**References:** [Mayo Clinic Laboratories](#) April 2020