

---

**Lab Dept:** Serology

**Test Name:** MYELOPEROXIDASE IGG ANTIBODY

---

***General Information***

**Lab Order Codes:** MPER

**Synonyms:** Anti-Myeloperoxidase Antibodies; Autoantibodies to Myeloperoxidase; MPO; P-ANCA; Perinuclear anti-neutrophil cytoplasmic antibody

**CPT Codes:** 83516 – Immunoassay for analyte other than infectious agent antibody or infectious agent antigen; qualitative or semiquantitative, multiple step method

**Test Includes:** Myeloperoxidase antibody level reported as positive, negative or equivocal.

---

***Logistics***

**Test Indications:** Useful for evaluating patients suspected of having immune-mediated vasculitis. May be useful to follow treatment response or to monitor disease activity in patients with microscopic polyangiitis (MPA).

**Lab Testing Sections:** Serology - Sendouts

**Referred to:** Mayo Medical Laboratories (Test: 80389/MPO)

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

STP Lab: 651-220-6550

**Test Availability:** Daily, 24 hours

**Turnaround Time:** 1 – 4 days, test set up Monday – Saturday

**Special Instructions:** N/A

---

***Specimen***

**Specimen Type:** Blood

**Container:** Red top tube

**Draw Volume:** 1.5 mL (Minimum: 1.1 mL) blood

**Processed Volume:** 0.5 mL (Minimum: 0.35 mL) serum

<b>Collection:</b>	Routine venipuncture
<b>Special Processing:</b>	Lab Staff: Centrifuge specimen, remove serum aliquot into a screw capped round bottom plastic vial. Store and ship at refrigerated temperatures. Forward promptly.
<b>Patient Preparation:</b>	None
<b>Sample Rejection:</b>	Gross hemolysis, gross lipemia, specimens other than serum, mislabeled or unlabeled specimens

---

***Interpretive***

**Reference Range:**

<b>All ages:</b>	
<0.4 U	Negative
0.4 – 0.9 U	Equivocal
≥1.0 U	Positive

**Critical Values:** N/A

**Limitations:**

Since it is not possible to distinguish between MPA and other causes of progressive renal failure or systemic illness (eg, Wegener’s granulomatosis, lupus nephritis, Goodpasture syndrome), this test should be employed in conjunction with other diagnostic tests in the initial evaluation of such patients.

The presence of MPO is quite specific for MPA, but it is recommended that positive results obtained by enzyme immunoassay be confirmed by another method. This is best accomplished by testing for pANCA, which confirms the positive MPO result and increases the diagnostic specificity for MPA to 97%. Nevertheless, positive results for MPO have been reported in patients with SLE, Goodpasture’s syndrome, and Chung-Strauss syndrome. Therefore, clinicians must rule out these diagnoses to maximize the specificity and positive predictive value of the MPO test result.

While sequential measurements of MPO may be used to follow treatment response or to monitor disease activity in patients with MPA, results should not be exclusively relied upon to assess response to treatment or disease activity.

**Methodology:** Multiplex flow immunoassay

**References:** [Mayo Medical Laboratories Web Page](#) June 2013

**Updates:**

11/18/2008: Reference range and method change.

1/9/2009: CPT updates

6/30/2010: Storage temp moved from frozen to refrigerated.

1/16/2012: CPT update