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: 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: SST (Gold, marble or red) tube
Draw Volume: 1.5 mL (Minimum: 1.1 mL) blood
Processed Volume: 0.5 mL (Minumum: 0.35 mL) serum
**Collection:** Routine venipuncture

**Special Processing:** Lab Staff: Centrifuge specimen, remove serum aliquot into a screw capped round bottom plastic vial. Store and ship at refrigerated temperatures. Forward promptly.

**Patient Preparation:** None

**Sample Rejection:** Gross hemolysis, gross lipemia, specimens other than serum, mislabeled or unlabeled specimens

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**Interpretive**

<table>
<thead>
<tr>
<th>Reference Range:</th>
<th>All ages:</th>
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<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;0.4 U</td>
<td>Negative</td>
</tr>
<tr>
<td>0.4 – 0.9 U</td>
<td>Equivocal</td>
</tr>
<tr>
<td>≥1.0 U</td>
<td>Positive</td>
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**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](https://www.mayoclinic.org) December 2017
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
12/22/2017: Collection container update.