**Lab Dept:** Serology  
**Test Name:** HYPERSENSITIVITY PNEUMONITIS SEROLOGY

### General Information

**Lab Order Codes:** HPS  
**Synonyms:** Hypersensitivity Pneumonitis Serology, Serum; Allergic Lung Serology; Aspergillus Fumigatus; Farmer’s Lung Serology; Farmer’s Lung Antibody; Micropolyspora Faeni; Precipitin Aspergillus Fumigatus; Precipitin Micropolyspora Faeni; Precipitin Thermoactinomyces Vulgaris; Thermoactinomyces Vulgaris; Apergillus Preciptans

**CPT Codes:** 86606 – Antibody; aspergillus  
86609 x2 – Aspergillus, bacterium not elsewhere specified

**Test Includes:** IgG antibodies to *Micropolyspora faeni*, *Thermoactinomyces vulgaris*, and *Aspergillus fumigatus*

### Logistics

**Test Indications:** Evaluation of patients suspected of having HP induced by exposure to *Aspergillus fumigatis*, Thermoactinomyces vulgaris or Micropolyspora faeni  
**Lab Testing Sections:** Serology - Sendouts  
**Referred to:** Mayo Medical Laboratories (MML Test: SAL)  
**Phone Numbers:**  
MIN Lab: 612-813-6280  
STP Lab: 651-220-6550

**Test Availability:** Daily, 24 hours  
**Turnaround Time:** 1 – 3 days, test set up Monday - Friday  
**Special Instructions:** N/A

### Specimen

**Specimen Type:** Blood  
**Container:** Red top tube  
**Draw Volume:** 1.5 mL (Minimum: 0.9 mL) blood
**Processed Volume:** 0.5 mL (Minimum: 0.3 mL) serum

**Collection:** Routine venipuncture

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

**Patient Preparation:** None

**Sample Rejection:** Specimens other than serum, mislabeled or unlabeled specimens

### Interpretive

<table>
<thead>
<tr>
<th>Reference Range:</th>
<th>Organism IgG Ab</th>
<th>Age:</th>
<th>Reference range (mg/L):</th>
</tr>
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<tbody>
<tr>
<td></td>
<td><em>Aspergillus fumigatus</em></td>
<td>&lt;4 years:</td>
<td>Not established</td>
</tr>
<tr>
<td></td>
<td></td>
<td>≥4 years:</td>
<td>≤102</td>
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<tr>
<td></td>
<td><em>Micropolyspora faeni</em></td>
<td>0 - 12 years:</td>
<td>≤4.9</td>
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<tr>
<td></td>
<td></td>
<td>13 - 18 years:</td>
<td>≤9.1</td>
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<td></td>
<td></td>
<td>&gt;18 years:</td>
<td>≤13.2</td>
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<tr>
<td></td>
<td><em>Thermoactinomyces vulgaris</em></td>
<td>0 - 12 years:</td>
<td>≤6.6</td>
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<td>13 - 18 years:</td>
<td>≤11.0</td>
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<tr>
<td></td>
<td></td>
<td>&gt;18 years:</td>
<td>≤23.9</td>
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</tbody>
</table>

Elevated concentrations of IgG antibodies to *Aspergillus fumigatus*, *Thermoactinomyces vulgaris*, or *Micropolyspora faeni* in patients with signs and symptoms of Hypersensitivity Pneumonitis is consistent with disease caused by exposure to 1 or more of these organic antigens. Extreme elevations (>5 times the upper limit of normal) occur in some patients with active disease.

**Critical Values:** N/A
**Limitations:**

IgG antibodies to *Aspergillus fumigatus*, *Thermoactinomyces vulgaris* or *Micropolyspora faeni* are detectable in sera from healthy individuals and the presence of antibodies is not sufficient to establish the diagnosis of Hypersensitivity Pneumonitis.

Elevated concentration of antibodies to *Aspergillus faeni* are found in patient with invasive aspergillosis and cavitary lung disease as well as Hypersensitivity Pneumonitis.

The levels of antibodies to these antigens often decrease following treatment; but elevated levels may persist in treated patients for long periods. The measurement of IgG antibodies to these antigens should not be relied upon exclusively to establish the diagnosis of Hypersensitivity Pneumonitis.

**Methodology:**

Fluorescence Enzyme Immunoassay (FEIA)

**References:**

Mayo Medical Laboratories July 2013

**Updates:**

7/12/2006: Reference ranges expanded to include pediatrics and method previously listed as Immunodiffusion.

4/28/10: Updated minimum volumes

8/23/12: Reference range change for Aspergillus fumigatus, IgG

1/19/2017: CPT update.