

## Overview

### Useful For

Evaluation of patients suspected of having hypersensitivity pneumonitis induced by exposure to *Thermoactinomyces vulgaris*

### Method Name

Fluorescence Enzyme Immunoassay (FEIA)

### NY State Available

Yes

## Specimen

### Specimen Type

Serum

### Specimen Required

#### Container/Tube:

**Preferred:** Serum gel

**Acceptable:** Red top

**Specimen Volume:** 0.5 mL

### Specimen Minimum Volume

0.3 mL

### Reject Due To

Gross hemolysis	OK
Gross lipemia	OK

### Specimen Stability Information

Specimen Type	Temperature	Time	Special Container
Serum	Refrigerated (preferred)	21 days	
	Frozen	21 days	

## Clinical and Interpretive

### Clinical Information

*Thermoactinomyces vulgaris* is one of the causative agents of hypersensitivity pneumonitis (HP). Other causative microorganisms include *Micropolyspora faeni* and *Aspergillus fumigatus*. The development of HP caused by

*Thermoactinomyces vulgaris* is accompanied by an immune response to *Thermoactinomyces vulgaris* antigens with production of IgG antibodies. While the immunopathogenesis of HP is not known, several immune mechanisms are postulated to play a role, including both cellular and humoral mechanisms.(1)

### Reference Values

0-12 years: < or =6.6 mg/L

13-18 years: < or =11.0 mg/L

>18 years: < or =23.9 mg/L

### Interpretation

Elevated concentrations of IgG antibodies to *Thermoactinomyces vulgaris*, *Aspergillus fumigatus*, or *Micropolyspora faeni* in patients with signs and symptoms of hypersensitivity pneumonitis may be consistent with disease caused by exposure to 1 or more of these organic antigens.

### Cautions

IgG antibodies to *Thermoactinomyces vulgaris*, *Aspergillus fumigatus*, or *Micropolyspora faeni* may be found in sera from healthy individuals; the presence of these specific antibodies is not sufficient to establish the diagnosis of hypersensitivity pneumonitis (HP).

The concentrations of antibodies to these antigens may decrease following treatment, although elevated concentrations may persist in treated patients.

### Clinical Reference

1. Fink JN, Zacharisen MC: Chapter 69: Hypersensitivity pneumonitis. In Allergy Principles and Practice. Vol 1. Fifth edition. Edited by E Middleton Jr, CE Reed, EF Ellis, et al. St. Louis, MO, Mosby Year Book Inc., 1998
2. Girard M, Lacasse Y, Cormier Y: Hypersensitivity pneumonitis. Allergy 2009;64:322-334
3. Grunes D, Beasley MB: Hypersensitivity pneumonitis: A review and update of histologic findings. J Clin Pathol 2013;66:888-895

### Performance

#### Method Description

The Phadia CAP System specific IgG fluorescence enzyme immunoassay (FEIA) provides an in vitro method for measuring the levels of circulating specific IgG antibodies in human blood samples. Specific IgG from the patient's serum reacts with the antigen of interest, which is covalently coupled to an ImmunoCAP. After washing away non-specific IgG, enzyme labeled anti-IgG antibodies are added to form a complex. After incubation, unbound enzyme-anti IgG is washed away and the bound complex is then incubated with a developing agent. After stopping the reaction, the fluorescence of the eluate is measured. The fluorescence is proportional to the amount of specific IgG, which is present in the patient's sample, ie, the higher the fluorescence value, the more specific IgG antibody is present.(Package insert: Phadia AB, Uppsala, Sweden 2009)

#### PDF Report

No

#### Day(s) Performed

Monday through Friday

**Report Available**

Same day/1 to 3 days

**Specimen Retention Time**

14 days

**Performing Laboratory Location**

Rochester

**Fees and Codes****Fees**

- Authorized users can sign in to [Test Prices](#) for detailed fee information.
- Clients without access to Test Prices can contact [Customer Service](#) 24 hours a day, seven days a week.
- Prospective clients should contact their Regional Manager. For assistance, contact [Customer Service](#).

**Test Classification**

This test was developed, and its performance characteristics determined by Mayo Clinic in a manner consistent with CLIA requirements. This test has not been cleared or approved by the US Food and Drug Administration.

**CPT Code Information**

86609

**LOINC® Information**

Test ID	Test Order Name	Order LOINC Value
TAMV	Thermoactinomyces vulgaris, IgG Ab	34190-9

Result ID	Test Result Name	Result LOINC Value
TAMV	Thermoactinomyces vulgaris, IgG Ab	34190-9