

## Bird Fancier's Lung Disease

**Test Name:** Bird Fancier's Precipitin Panel I  
**Test Code:** 401707  
**CPT Code:** 86331 x 10

### Antigens Included in Panel:

<i>Pigeon Droppings</i>	<i>Pigeon Serum</i>
<i>Chicken Serum</i>	<i>Parrot Serum</i>
<i>Parakeet Serum</i>	<i>Canary Droppings</i>
<i>Parrot Droppings</i>	<i>Parakeet Droppings</i>
<i>Cockatiel Droppings</i>	<i>Finch Droppings</i>

### **Background:**

Bird Fancier's lung disease is a common lung disorder of individuals who are exposed to bird droppings and other aerosolized avian antigens. This normally includes pet owners and those with occupational contact. This disorder is sometimes also called pigeon breeder's lung disease. The pathology is a T-lymphocyte dependent (Type IV) granulomatous pulmonary inflammation and is a special case of hypersensitivity pneumonitis (HP) or extrinsic allergic alveolitis. Although HP was originally believed to involve immune complex mediated pathology (i.e. Type III), most current evidence indicates that it may be primarily a Type IV immunopathological disease. However, it is possible that it may involve a combination of these two mechanisms. The serological tests are still useful since they indicate exposure and immunologic sensitization.

**Method:** Immunodiffusion in gel (Also called Ouchterlony or Gel Diffusion methods)

**Results Reported:** Positive or Negative  
(Presence or absence of one or more lines)

**Normal Value:** Negative

**Specimen Requirement:** 1 mL of serum. Collect blood in red top or SST. Sera may be shipped frozen or at ambient temperatures.

**Stability of serum:** 4 weeks (room temp), 4 weeks (refrigerated), 1 year (frozen).

### **Interpretation and Clinical Utility:**

For patients who have both precipitating antibody specific for bird antigens and the symptoms and the clinical findings of pneumonitis, a diagnosis of bird fancier's lung disease may be appropriate. It is important to recognize that a positive serology alone cannot be used to establish the diagnosis of HP or Bird Fancier's Lung without the appropriate clinical findings and exposure history. In patients who lack the symptoms of HP but who have precipitating antibody (usually IgG), the serology can be taken to docu-

ment significant exposure to bird antigens. Although the gel diffusion methods may be less sensitive than newer methods, such as the ELISA tests for these bird antigens, it may be more specific.

### **Related Bird Panels Available:**

<u>Panel Name/Composition</u>	<u>Code #</u>
<b>Bird &amp; Mold Precipitin Panel II</b> .....	401708
<i>(Panel includes these 10 bird precipitins plus Aspergillus and A. pullulans.)</i>	
<b>Bird Fancier's Profile Panel III</b> .....	401709
<i>(Panel includes the 10 bird precipitin tests, a Total IgE and 5 bird-specific IgE tests.)</i>	

### **References:**

- (1) Fink J et al. Precipitins and the diagnosis of hypersensitivity pneumonitis. *J Allergy Clin Immunol* 1971; 48: 179.
- (2) Slavin R, Hypersensitivity Pneumonitis, in Atlas of Allergies, Chapter 7, 1990, Fireman and Slavin, eds. JB Philadelphia, Lippincott Co.
- (3) Fink J. Hypersensitivity Pneumonitis, in Allergy, Asthma, and Immunology from Infancy to Adulthood, 3<sup>rd</sup> Edition, Chapter 39, 1996, Bierman et al., eds., Philadelphia W.B. Saunders Co.

*For more information, contact*

### **IBT Laboratories**

11274 Renner Boulevard, Lenexa, Kansas 66219  
**913.492.2224**      **800.637.0370**  
www.ibtlabs.com

Bird Fancier's\_rev\_080708