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**Lab Dept:** Chemistry

**Test Name:** PEANUT, TOTAL ALLERGEN IGE WITH REFLEX TO COMPONENT PANEL

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**General Information**

**Lab Order Codes:** PEANR: Peanut, Total with Reflex to Peanut Component Panel (Ara h1, Ara h2, Ara h3, Ara h8, Ara h9)

PEANC: Peanut Components only (Panel (Ara h1, Ara h2, Ara h3, Ara h8, Ara h9). An Add-to test code to use when total Peanut result is  $\geq 0.1$  kU<sub>A</sub>/L. (Peanut Allergen IgE total should have been tested with in the previous 28 days and the sample available in the lab.

ARAH1, ARAH2, ARAH3, ARAH8, ARAH9: Orderable individually

**Synonyms:** Allergy testing; Specific IgE, Peanut, Components

**CPT Codes:** 86003 x1– Allergen specific IgE for to total Peanut

**Reflex or Component only order:**  
86003 x5 –(Peanut component Allergen IgE, at an additional charge)

**Test Includes:** Includes total Peanut and Ara h1, Ara h2, Ara h3, Ara h8 and Ara h9 peanut components.

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**Logistics**

**Test Indications:** A blood test in addition to case history is a valuable tool in making a clear and correct differentiation between those patients that have symptoms related to allergies and those who do not. The differentiation between allergy or not is a prerequisite for giving optimal patient management and guides decision on whether a medication or avoidance advice should be prescribed. Consequently, patient well-being can be improved. Typical situations where a blood test can be of high value may include:

- patients with persistent and/or recurrent symptoms
- patients not responding to treatment
- patients telling about anaphylactic like symptoms

The new approach of Molecular Allergology takes the diagnostics one step further by quantifying the allergen specific IgE antibodies to single, pure allergen molecules. The enhanced precision thereby obtained strengthens the clinical utility of IgE testing.

<b>Peanut Component Protein</b>	<b>Associations/Stability</b>
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Ara h1 Storage Protein Peanut	<ul style="list-style-type: none"> <li>● Associated with systemic reactions.</li> <li>● Stable to heat and digestion</li> </ul>
Ara h2 Storage Protein Peanut	
Ara h3 Storage Protein Peanut	
Ara h8 PR-10 Protein	<ul style="list-style-type: none"> <li>● Associated with local reactions (eg. Oral allergy syndrome – OAS)</li> <li>● Labile to heat and digestion</li> <li>● Associated with allergy to birch and birch related tree pollen</li> </ul>
Ara h9 Lipid Transfer Protein (LTP)	<ul style="list-style-type: none"> <li>● Associated with both local reactions (eg. Oral allergy syndrome – OAS)</li> <li>● Stable to heat and digestion</li> <li>● Associated with allergy to peach and peach related fruits</li> </ul>

<b>Lab Testing Sections:</b>	Chemistry
<b>Phone Numbers:</b>	MIN Lab: 612-813-6280 STP Lab: 651-220-6550
<b>Test Availability:</b>	Daily, 24 hours
<b>Turnaround Time:</b>	1 – 4 days, set up daily, Monday – Friday
<b>Special Instructions:</b>	N/A

***Specimen***

<b>Specimen Type:</b>	Blood
<b>Container:</b>	Red, marble or gold top tube
<b>Draw Volume:</b>	4.5 mL (Minimum: 3 mL) blood
<b>Processed Volume:</b>	1.5 mL (Minimum: 1 mL) serum
<b>Collection:</b>	Routine venipuncture
<b>Special Processing:</b>	Lab Staff: Centrifuge specimen, remove serum aliquot into plastic tube. Store at refrigerated temperatures for up to 1 week.
<b>Patient Preparation:</b>	None

**Sample Rejection:**

Mislabeled or unlabeled specimens

**Interpretive**

<b>Total Peanut IgE and Peanut Components Ranges:</b>	
<b>kU<sub>A</sub>/L:</b>	<b>Interpretation:</b>
<0.1	Absent/undetectable
0.1 – 0.34	Equivocal/borderline
0.35 – 0.69	Equivocal
0.70 – 3.49	Weakly positive
3.50 – 17.49	Moderately positive
17.50 – 49.99	Positive
50.00 – 100.00	Strongly positive
>100.00	Very strongly positive
<p>If Total Peanut is &lt;0. 1 kU<sub>A</sub>/L, Peanut component testing is not indicated.</p> <p>Note: Sensitization to any of the peanut components is significant regardless of the quantitation (kU<sub>A</sub>/L). Peanut components h1, h2 h3 and h9 may produce systemic allergic reactions, many of which can be severe. Peanut component h8 has been associated with milder symptoms. Any one of these components should be considered as potentially significant.</p>	

**Critical Values:**

N/A

**Limitations:**

Peanut/peanut component Allergen IgE <0.1 kU<sub>A</sub>/L will be reported as Absent/undetectable.

Technical range for Total Peanut and individual Peanut Components is 0.1 – 100.0 kU<sub>A</sub>/L.

Negative peanut component results with a positive total peanut IgE does not rule out a peanut allergy.

**Methodology:**

ImmunoCAP allergen-specific IgE assay is a fluoroenzyme-immunoassay (FEIA), built on a classic sandwich technique.

**References:**

Phadia Inc Thermo Scientific (April 2007) 4169 Commercial Avenue,  
Portage, MI 49002 <http://www.phadia.us/>

**Updates:**

2/9/2016: Update container types