



Laboratory Dimensions

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SANFORD LABORATORIES OFFERS COMPONENT ALLERGY TESTING

Allergy component testing is a new area which is evolving rapidly. The use of allergen components in testing for specific IgE sensitization may assist in the assessment of the clinical risk for reaction in sensitized patients. Sanford Laboratories is pleased to announce the addition to our already extensive allergen test menu of whole extract: “component based allergens”— Component Allergy testing for peanut, egg, and milk. For peanut, we test for five available components for more detailed assessment; for egg, we test for two components; and for milk, three components.

In addition, Sanford Laboratories will be reporting **all** specific IgE testing allergen testing and Component Allergy testing utilizing the ImmunoCAP Specific IgE Assay to accurately measure and report quantitative results down to **0.10 kU_A/L**. In general, low IgE antibody levels indicate a low probability of clinical disease, whereas high levels of antibody to an allergen correlate well with clinical disease. However, all test results should be interpreted in the context of the patient’s history and symptoms as even very low levels can be clinically relevant, especially with components. Therefore, our full analytical measuring range is 0.01-100kU_AL.

Component testing can help explain symptoms that may be due to cross reactivity, given the potential for a *life threatening reaction* associated with sensitization to certain allergen components.

Peanut Allergen Component Testing

An allergen test that detects sensitization to peanut is only the first step in decoding the patient’s allergy. Peanut Component tests can help determine the likelihood of a systemic reaction and the necessary precautions that may be prescribed.

Peanut Allergen Component testing can help determine which proteins the patient is sensitized to. It is strongly recommended to measure all five available components, because any level of sensitization may be clinically important.

CHARACTERISTICS OF INDIVIDUAL PROTEINS

Peanut f 13	Ara h 8 f 352	Ara h 9 f 427	Ara h 1, 2, 3 f 422, f 423, f 424
<ul style="list-style-type: none"> High levels of peanut IgE can predict the likelihood of peanut sensitivity, but may not be solely predictive of reactions or allergic responses¹ 	<ul style="list-style-type: none"> LOWER RISK of systemic reaction² Risk of mild, localized symptoms, such as itching/tingling of the lips, mouth, and oropharynx³ Cross-reactive with pollens (e.g., birch)³ 	<ul style="list-style-type: none"> VARIABLE RISK of systemic reaction including anaphylaxis⁴ Often accompanied by sensitization to other peanut proteins⁵ Cross-reactive with fruits with pits (e.g., peaches)⁴ 	<ul style="list-style-type: none"> HIGHER RISK of systemic reaction including anaphylaxis^{6,7} Sensitization to Ara h 2 is nearly always associated with clinical peanut allergy²

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77.6% of patients sensitized to peanut may not be at risk for a **systemic reaction**.

Ara h 8 f 352	Ara h 9 f 427	Ara h 1, 2, 3 f 422, f 423, f 424	Management Considerations	
+	-	-		<p>Oral food challenge (OFC) with a specialist may be recommended. High likelihood that patient may pass OFC. If patient passes OFC:</p> <ul style="list-style-type: none"> • Foods prepared with or around peanuts may be consumed • Patient not restricted to peanut-free zones
+/-	+	-		<ul style="list-style-type: none"> • If there is no clinical history of symptoms, please see considerations above • If there is a clinical history of symptoms, please see considerations below
+/-	+/-	+		<ul style="list-style-type: none"> • Choose peanut-free zones for patient's safety • Prescribe epinephrine auto-injector • Family, colleagues, and teachers should be made aware of allergy and have a plan

As in all diagnostic testing, a diagnosis must be made by the physician based on test results, individual patient history, the physician's knowledge of the patient, and the physician's clinical judgement.

Egg Component Testing

Egg Component testing can help determine which proteins affect your patients. An ImmunoCAP allergen test that detects sensitization to egg is only the first step in decoding your patient's allergy. ImmunoCAP Egg Component testing can help determine the likelihood of a systemic reaction and the necessary precautions that may be prescribed.

With Egg Component test results, the health care provider has more information necessary to evaluate the patient's potential risk of systemic reaction, manage dietary modifications and medication, and improve the patient's quality of life.

CHARACTERISTICS OF INDIVIDUAL PROTEINS		
Egg White f 1	Ovalbumin Gal d 2/f 232	Ovomucoid gal d 1/f 233
<ul style="list-style-type: none"> • High levels of egg white IgE may predict the likelihood of sensitivity, but may not be solely predictive of reactions to baked egg or allergy duration¹ 	<ul style="list-style-type: none"> • Susceptible to heat denaturation² • HIGHER RISK of reaction to uncooked egg^{1,3} • LOWER RISK of reaction to baked egg^{1,3*} • Patient likely to "outgrow" egg allergy⁴ 	<ul style="list-style-type: none"> • Resistant to heat denaturation² • HIGHER RISK of reaction to all forms of egg¹ • Patient unlikely to "outgrow" egg allergy with high levels of specific IgE to ovomucoid^{5,6,7,8}

*In clinical studies, extensively baked muffin and waffle were heated to the point of protein denaturation.

70% of children with egg allergy do not react to **baked egg**.

Knowing which protein your patient is sensitized to *can help develop a management plan*. A specific IgE blood test that detects sensitization to egg white is the first step in discovering a patient's allergy. Egg Allergen Component tests can help determine the likelihood of reaction to products baked with egg, such as muffins or cookies, as well as the likelihood of allergy persistence.

Ovalbumin Gal d 2/f 232	Ovomucoid Gal d 1/f 233	Management Considerations	
+	-		<ul style="list-style-type: none"> • Avoid uncooked eggs • Likely to tolerate baked egg • Baked egg oral food challenge with a specialist may be appropriate • Consider repeating IgE component test biennially during childhood to determine potential tolerance • May be transferred via breast milk, so mothers of infants with egg allergy should take caution when breast-feeding
+/-	+		<ul style="list-style-type: none"> • Avoid all forms of egg • Consider repeating IgE component test biennially during childhood to determine potential tolerance • Patients sensitized to ovalbumin with low levels of IgE to ovomucoid may react to egg that is not fully baked

As in all diagnostic testing, any diagnosis or treatment plan must be made by the physician based on test results, individual patient history, the physician's knowledge of the patient, and the physician's clinical judgement.

Milk Allergen Component Testing

A specific IgE blood test that detects sensitization to cow's milk is the first step in discovering the patient's allergy. Milk Allergen Component tests can help you determine the likelihood of reaction to baked goods, such as cookies or cheese pizza, as well as the likelihood of allergy persistence.

CHARACTERISTICS OF INDIVIDUAL PROTEINS			
Cow's Milk f 2	α-lactalbumin Bos d 4/f 76	β-lactoglobulin Bos d 5/f 77	Casein Bos d 8/f 78
<ul style="list-style-type: none"> • High levels of cow's milk IgE may predict the likelihood of sensitivity, but may not be solely predictive of reactions to baked milk or allergy duration¹ 	<ul style="list-style-type: none"> • Susceptible to heat denaturation² • HIGHER RISK of reaction to fresh milk^{1,3} • LOWER RISK of reaction to baked milk^{1,3*} • Patient likely to "outgrow" milk allergy⁴ 	<ul style="list-style-type: none"> • Susceptible to heat denaturation² • HIGHER RISK of reaction to fresh milk^{1,3} • LOWER RISK of reaction to baked milk^{1,3*} • Patient likely to "outgrow" milk allergy⁴ 	<ul style="list-style-type: none"> • Resistant to heat denaturation³ • HIGHER RISK of reaction to all forms of milk^{1,3,5} • Patient unlikely to "outgrow" milk allergy with high levels of specific IgE to casein⁴

*In clinical studies, extensively baked muffin, waffle, and cheese pizza were heated to the point of protein denaturation.

75% of children with cow's milk allergy do not react to **baked milk**.

Milk Component test results, health care providers have more information necessary for proper diagnosis, allowing providers to evaluate the patient's potential risk of systemic reaction, and develop a more comprehensive management plan.

α -lactalbumin - Bos d 4/1 76	β -lactoglobulin BOS d 5/1 77	Casein Bos d 8/1 78	Management Considerations
+	+	-	
+	-	-	<ul style="list-style-type: none"> Avoid all forms of cow's milk Unlikely to become tolerant of cow's milk over time Avoid cow's milk and baked milk products (yogurt, cookies, cakes), as well as products processed with milk (chocolate, sausage, potato chips)
-	+	-	
+/-	+/-	+	<ul style="list-style-type: none"> Avoid all forms of cow's milk Unlikely to become tolerant of cow's milk over time Avoid cow's milk and baked milk products (yogurt, cookies, cakes), as well as products processed with milk (chocolate, sausage, potato chips)

As in all diagnostic testing, a diagnosis must be made by the physician based on test results, individual patient history, the physician's knowledge of the patient, and the physician's clinical judgement.

Ordering Information:

Test Code: BLOD1515

Test: Peanut Allergen Reflex to Components

CPT Code: 86003

Specimen Requirements: 1.2 mL serum. Refrigerate.

Stability: REFT – 7 days

Frozen >7 days

Test Code: BLOD1516

Test: Peanut Allergen Component Panel

CPT Code: 86003

Specimen Requirements: 1.0 mL serum. Refrigerate.

Stability: REFT – 7 days

Frozen >7 days

Test Code: BLOD1519

Test: Egg White Allergen Reflex to Components

CPT Code: 86003

Specimen Requirements: 0.6 mL serum. Refrigerate.

Stability: REFT – 7 days

Frozen >7 days

Test Code: BLOD1520

Test: Egg White Allergen Components Panel

CPT Code: 86003

Specimen Requirements: 0.4 mL serum. Refrigerate.

Stability: REFT – 7 days

Frozen >7 days

Test Code: BLOD1517

Test: Milk Allergen Reflex to Components

CPT Code: 86003

Specimen Requirements: 0.8 mL serum. Refrigerate.

Stability: REFT – 7 days

Frozen >7 days

Test Code: BLOD1518

Test: Milk Allergen Component Panel

CPT Code: 86003

Specimen Requirements: 0.6 mL serum Refrigerate.

Stability: REFT – 7 days

Frozen >7 days.

References: ImmunoCAP Handouts from Thermo Fisher Scientific

WE HONOR ALL MEDICAL LABORATORY PROFESSIONALS!

APRIL 23-29, 2017



Laboratory Professionals
GET RESULTS
Medical Laboratory Professionals Week
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ENHANCEMENTS TO OUR WEB SITE

Sanford Laboratories is pleased to announce a “new look” to our Web site which includes a new *Test Menu* format.

Along with an updated look, the enhancements offer you the following features:

- An expanded number of tests available on the Web site *Test Menu*
- *Test Menu Search* with intuitive prompting to help find specific test information more quickly
- A more user-friendly sidebar menu to access information you are seeking under *General Information*, i.e. *General Specimen Labeling Policy*, etc.


Browse by Name

A	B	C	D	E	F
G	H	I	J	K	L
M	N	O	P	Q	R
S	T	U	V	W	X
Y	Z	#			

General Information

- General Specimen Labeling Policy
- Blood Bank Specimen Labeling Policy
- General Information Specimen Collection
- Coagulation Testing and Platelet
- Poor Plasma Preparation
- Blood Smear Preparation
- Malaria Smears
- Microbiology Specimen Collection
- Blood Culture Collection
- Anaerobic Culture Collection
- Group B Streptococcus Collection
- Random Urine Collection
- 24-Hour Urine Collection
- Parasite General Specimen Collection
- Pinworm Collection

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