



IgE Specific Allergen Testing Update

On April 2, 2019 the following changes are being made regarding IgE specific allergen testing:

- I. Allergen food component panels are available for eggs, milk and peanuts.
- II. The Respiratory, Childhood and Food allergy panels have been updated to the most recent regional/national recommendations.
- III. The reportable range has been expanded to increase sensitivity for all specific IgE tests.

I. Allergen Food Component Testing

The finding of a positive “whole” antibody is important in identifying patients sensitized to particular foods. Subsequent food allergen component testing can provide additional information useful for patient management. Results of component testing may be also be used by an allergist/specialist to determine if an oral food challenge is appropriate. The three available food component panels are described below. These component allergen tests are also automatically performed whenever there is a positive “whole” allergen result for the respective Egg White, Milk or Peanut tests.

Egg Component Panel: Egg White, Ovalbumin, Ovomuroid

Sunquest: EGGCP Epic: LAB3555

Allergen	Characteristics
Egg White (whole)	-May predict likelihood of egg sensitivity, but may not be solely predictive of allergy duration or reactions to egg as an ingredient in baked foods. -70% of children with egg allergy do not react to baked egg.
Ovalbumin (component)	-Susceptible to heat denaturation. -Higher risk of reaction to uncooked egg. -Lower risk of reaction to egg as a baked ingredient. -Patient likely to "outgrow" egg allergy.
Ovomuroid (component)	-Resistant to heat denaturation. -Higher risk of reaction to all forms of egg. -Patient unlikely to "outgrow" egg allergy.

Milk Component Panel: Cow's Milk, α -lactalbumin, β -lactoglobulin, casein

Sunquest: MLKCP Epic: LAB3558

Allergen	Characteristics
Cow's Milk (whole)	-May predict likelihood of milk sensitivity, but may not be solely predictive of allergy duration or reactions to egg as an ingredient in baked foods. -75% of children with milk allergy do not react to baked milk.
α -lactalbumin (component)	-Susceptible to heat denaturation. -Higher risk of reaction to fresh milk. -Lower risk of reaction to milk as a baked ingredient. -Patient likely to "outgrow" milk allergy.
β -lactoglobulin (component)	-Susceptible to heat denaturation. -Higher risk of reaction to fresh milk. -Lower risk of reaction to milk as a baked ingredient. -Patient likely to "outgrow" milk allergy.
Casein (component)	-Resistant to heat denaturation. -Higher risk of reaction to all forms of milk. -Patient unlikely to "outgrow" milk allergy.

Peanut Component Panel: Peanut, Ara h 8, 9, 1, 2, 3 & 6

Sunquest: PNUTCP Epic: LAB3553

Allergen	Characteristics
Peanut (whole)	-May predict likelihood of peanut sensitivity, but may not be solely predictive of reactions or allergic response. -78% of patients sensitized to peanut may not be at risk for a systemic reaction.
Ara h 8 (component)	-Lower risk of systemic reaction. -Risk of mild, localized symptoms such as itching/tingling of the lips, mouth & oropharynx -Cross-reactive with pollens, such as birch tree. -Patient likely not restricted to peanut-free zones.
Ara h 9 (component)	-Variable risk of systemic reaction. -Often accompanied by sensitization to other peanut proteins. -Cross-reactive with fruits containing pits, such as peaches. -Patient variability in need for restriction to peanut free zones.
Ara h 1,2,3 & 6 (components)	-Higher risk of systemic reactions, including anaphylaxis. -Choose peanut free zones for patient's safety. -Family, colleagues and teachers should be made aware of allergy and have a plan. Prescription of epinephrine auto-injector may be considered.

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.



II. Updates to Respiratory, Food and Childhood Panels

ThermoFisher ImmunoDiagnostics, the manufacturer of the ImmunoCAP products used for specific IgE allergen testing, periodically updates their suggested profiles for regional and national allergen profiles. These panels are designed to cover the majority of allergies and have been updated as shown below. Many more individual allergens are available for testing if indicated by patient history. These are listed on our [on-line catalog](#).

Respiratory Allergen Panel (Region 7)

Sunquest RSAL, Epic LAB2259

Mouse Urine is being added to the existing list of Alternaria mold, Aspergillus mold, Bermuda grass, Birch, Cat dander, Cedar, Cladosporium mold, Cockroach, Cottonwood, Dust mite DP, Dust mite DF, Dog dander, Elm, Maple, Mulberry, Nettle, Oak, Penicillium mold, Marsh elder, Ragweed (short), Russian thistle, Timothy grass, White ash and total IgE

Food Allergen Panel

Sunquest FALP, Epic LAB2430

Clam and Corn are being removed. Almond, Cashew, Hazelnut, Salmon and Tuna are being added, with the following tests remaining: Codfish, Cow's milk, Egg white, Peanut, Soybean, Sesame, Scallop, Shrimp, Walnut, Wheat and total IgE.

Childhood Allergen Panel

Sunquest CHAL, Epic LAB2151

Mouse Urine is being added to the existing list of Alternaria mold, Aspergillus mold, Cat dander, Cladosporium mold, Cockroach, Codfish, Cow's milk, Dust mite DP, Dust mite DM, Dog dander, Egg white, Peanut, Shrimp, Soybean, Wheat, Walnut and total IgE.

III. Reportable Range change

Based on manufacturer's studies, the lower end of the reportable range has been expanded from 0.35 kU/L down to 0.10 kU/L. This will allow detection of lower levels of specific IgE antibody.

Questions?

Please contact any of the following individuals if you have questions on these changes.

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