

LabCorp's regional respiratory profiles include the most common respiratory symptom triggers: pollens, mold, dust mites, insect emanations, and furry animals.<sup>1</sup> Now these profiles are also available with reflex to furry pet allergen components – cat and dog. Because risk for and severity of respiratory diseases increases with the number of furry allergen components to which a patient is sensitized<sup>2,3,4</sup> these reflexes may help enhance management strategies.

Self-reported food allergy is more common than confirmed allergy.<sup>5</sup> LabCorp's food allergen profile focuses on the small number of allergens that cause a high percentage of true food allergy: milk, egg, peanut, tree nuts, shellfish, fish, wheat and soy.

# It Takes Two: Respiratory and Food Allergen Profiles

## Area 12: Regional Respiratory Profile with Furry Pet Component Reflexes

Accurate diagnosis is foundational to treatment efficacy and disease control. However, respiratory symptoms are frequently diagnosed on history and physical findings alone, and studies have demonstrated this approach may only be accurate about 50 percent of the time.<sup>6</sup> Given the prevalence of co-existent asthma in allergic rhinitis patients, this may lead to sub-optimal outcomes, including unmanaged symptoms, repeat office visits, and unnecessary referrals.<sup>6</sup>

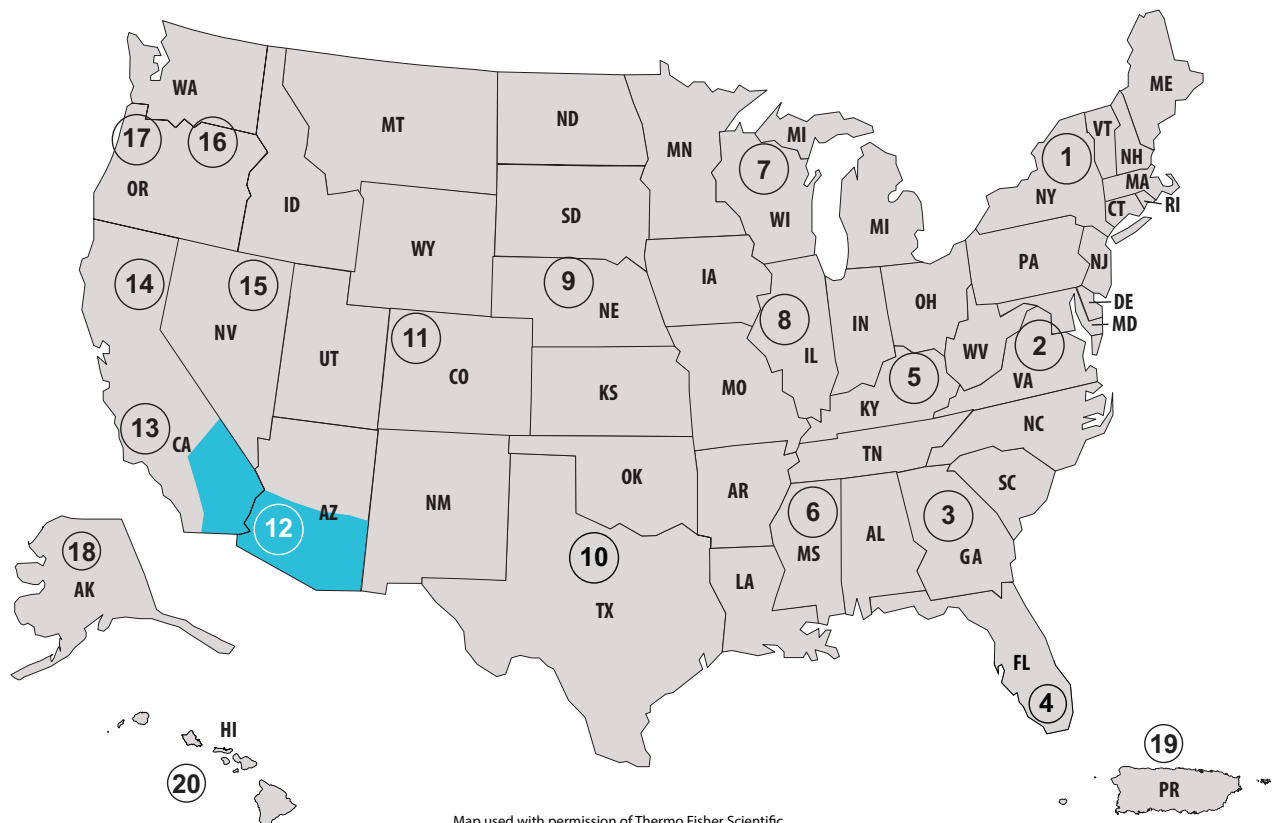
### Quantitative Allergen-specific IgE tests performed using the ImmunoCAP® method

#### 607055 Allergen Profile with Total IgE, Respiratory — Area 12 (Southern AZ desert area, Southern CA desert area)

**Method:** Thermo Fisher ImmunoCAP® **Specimen Requirement:** 3.5 mL serum (room temperature)

Tree	Weed	Grass	Mold	Animal/Dust
Cedar, Mountain Cottonwood Elm, American Mimosa/Acacia Oak, White Olive Tree	Mugwort Pigweed, Common Ragweed, Short Sheep Sorrel Thistle, Russian	Bermuda Grass Johnson Grass Rye Grass, Perennial	<i>Alternaria alternata</i> <i>Aspergillus fumigatus</i> <i>Cladosporium herbarum</i> <i>Penicillium chrysogenum</i>	Cat Dander Cockroach, German <i>D farinae</i> <i>D pteronyssinus</i> Dog Dander Mouse Urine

\*If cat IgE ≥ 0.35 kU/L, reflex tests Fel d 1 IgE, Fel d 2 IgE, Fel d 4 IgE will be added. If dog IgE ≥ 0.35 kU/L, reflex tests Can f 1 IgE, Can f 2 IgE, Can f 3 IgE, Can f 5 IgE will be added. If reflex testing is performed, additional charges/CPT codes may apply.



Map used with permission of Thermo Fisher Scientific.

# Common Food Allergens

Adverse reactions to foods may be broadly grouped into two categories: immune mediated (food allergy, Celiac) and non-immune mediated (mainly food intolerance, eg, lactose intolerance).<sup>7,8</sup> Symptom overlap among conditions within these two broad groups<sup>7,8</sup> may challenge an empiric diagnosis.

## When approaching suspected food allergy, it is important to note<sup>5</sup>:

- Self-reported food allergy is more common than confirmed allergy.
- Food allergy is more common in children.
- Food allergy is more common in individuals with other atopic diseases.
- A small number of allergens cause a high percentage of food allergy.

## The most common food allergens in order of prevalence include<sup>5</sup>:

- Milk
- Peanut
- Shellfish
- Wheat
- Egg
- Tree nuts
- Fish
- Soy

To aid in a differential diagnosis, expert guidelines recommend a detailed medical history and physical exam to help identify suspected foods to guide diagnosis, followed by testing focused on those suspected foods.<sup>5,8</sup>

## Quantitative Allergen-specific IgE tests performed using the ImmunoCAP® method

### 604783 Allergen Profile, Food IgE II With Component Reflexes\*

**Method:** Thermo Fisher ImmunoCAP® **Specimen Requirement:** 4 mL serum (room temperature)

Almond	Hazelnut (Filbert)	Scallop
Brazil Nut	Macadamia Nut	Sesame Seed
Cashew Nut	Milk	Shrimp
Clam	Peanut (Whole)	Soybean
Codfish	Pecan	Walnut
Corn	Pistachio	Wheat
Egg White		

If milk IgE  $\geq$  0.35 kU/L, reflex tests  $\alpha$ -lactalbumin IgE,  $\beta$ -lactoglobulin IgE, and casein IgE will be added. If egg white IgE  $\geq$  0.35 kU/L, reflex tests ovalbumin IgE and ovomucoid IgE will be added. If IgE to Brazil nut, cashew nut, hazelnut (filbert), peanut (whole), and/or walnut is  $\geq$  0.10 kU/L, reflex tests will be added as follows: Brazil nut: Ber e 1 IgE / cashew nut: Ana o 3 IgE / hazelnut (filbert): Cor a 1 IgE, Cor a 8 IgE, Cor a 9 IgE, and Cor a 14 IgE / peanut (whole): Ara h 1 IgE, Ara h 2 IgE, Ara h 3 IgE, Ara h 6 IgE, Ara h 8 IgE, and Ara h 9 IgE / walnut: Jug r 1 IgE and Jug r 3 IgE.

\*If reflex testing is performed, additional charges/CPT code(s) may apply.

## References

1. Wallace DV and Dykewicz, eds. The diagnosis and management of rhinitis: an updated practice parameter. *J Allergy Clin Immunol*. 2008;122:51-84
2. Nordlund B, Konradsen JR, Kull I et al. IgE antibodies to animal-derived lipocalin, kallikrein and secretoglobulin are markers of bronchial inflammation in severe childhood asthma. *Allergy* 2012;661-669.
3. Davila I, Dominguez-Ortega J, Navarro-Pulido A et al. Consensus document on dog and cat allergy. *Allergy* 2018; 1-17.
4. Patelis A, Gunnbjornsdottir M, Alving K et al. Allergen extract vs. component sensitization and airway inflammation, responsiveness and new-onset respiratory disease. *Clinical and Experimental Allergy* 2015(46); 730-740.
5. Sampson HA, Aceves S, Bock SA et al. Food allergy: a practice parameter update – 2014. *J Allergy Clin Immunol* 2014;1-10e.
6. Ahlstedt S, Murray CS. In vitro diagnosis of allergy: how to interpret IgE antibody results in clinical practice. *Primary Care Respir J* 2006;15:228-236.
7. Sicherer SA. Food allergy. *Lancet* 2002;360:701-710.
8. Boyce JA, Assa'ad A, Burks WA et al. Guidelines for the diagnosis and management of food allergy in the United States: report of the NIAID-sponsored expert panel. *J Allergy Clin Immunol* 2010;126(6):S1-S53.



www.LabCorp.com

Visit the online Test Menu at [www.LabCorp.com](http://www.LabCorp.com) for additional test options and full test information, including CPT codes and specimen collection instructions.