Foresight®

Allergen Specific IgE Antibody Detection Kit (Immunoblotting)

Immunoblot assay for 43 allergens in one test strip
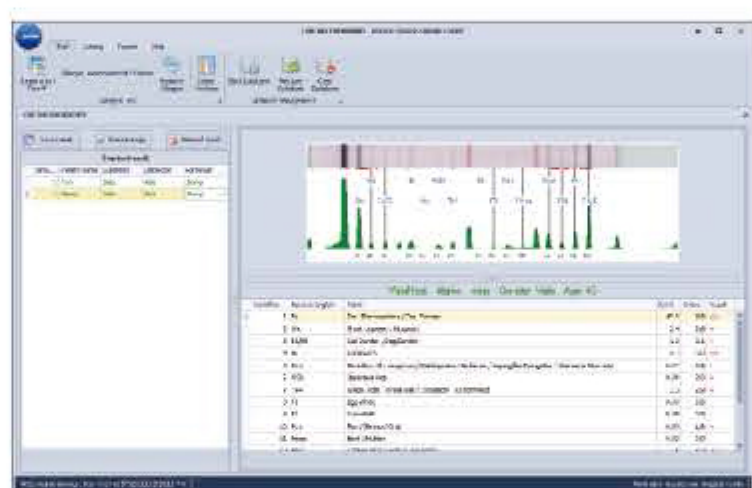
Immunoblot Assay

Food/Inhalation Allergens

***in vitro* Test – Serum**

Manual/Automated Operation

» Specifications of *Foresight*® Allergen Test Kit

- **Test Items: 28 Specific IgE for 43 kinds of common allergens in one strip**
- **Methodology:** Immunoblotting/ Western blot
- **Time to Result:** 2.5h
- **Specimen Type:** Serum
- **Specimen Volume:** 500 µL
- **Test Mode:** Manual operation or Automated operation

- **Package Size:** 10 tests/kit, 20 tests/kit
- **Storage Temperature:** 2-8° C
- **Shelf life:** 24 months
- **Sensitivity:** High sensitivity, up to 0.35 IU/mL
- **Result Reading:** Visual reading or digital scanning (Immunoblotting Analysis System software)

Combined   Food   Inhalation

» Advantage of Automated Operation

- Closed tubing system with ready to use software
- Minimized the operator exposures to potentially infective sample
- Carrying out the preparation of strips as well as all incubation and washing steps
- Standardized incubation of immunoblot strips- higher precision and reproducibility
- High throughput, up to 36 samples per run, take 2.5 hours
- 6 sample injection tubes avoiding cross contamination risk
- User-friendly operation and easy maintenance, intuitive screen software that permits the operator to maintain the system with a minimum of formal training

XD236

Digital Scanner and Software to give quantitative results

» Interpretation of results

Comparing the color intensity of reacted strip with the color chart, the interpretation of results (or digital scanning) as following:

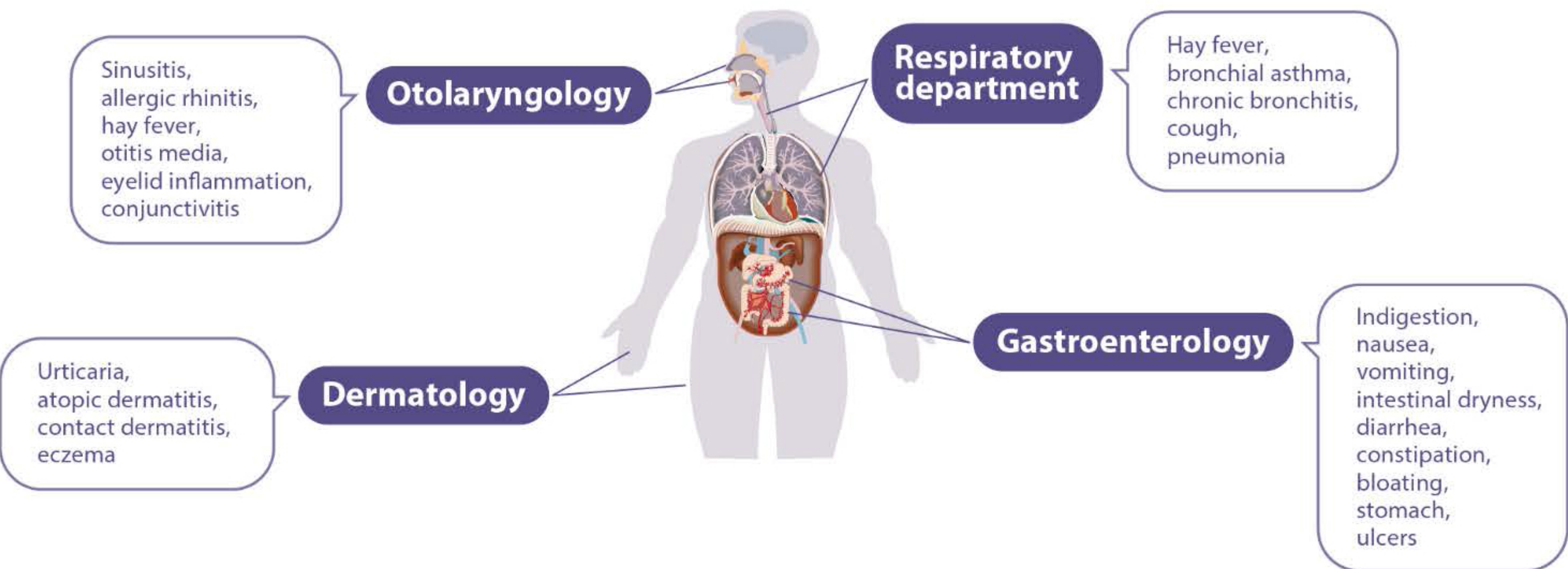| Class		Concentration of Specific IgE	Results	Color intensity	Clinical feature
0	-	<0.35 IU/ml	Negative	No colored line appears	No clinical symptoms
1	+	0.35-0.69 IU/ml	Low concentration of Allergen Specific IgE Antibody	Faint colored line	Partical clinical symptoms
2		0.7-3.49 IU/ml			
3	++	3.5-17.49 IU/ml	Medium concentration of Allergen Specific IgE Antibody	Distinct colored line	Many clinical symptoms
4		17.5-49.9 IU/ml			
5	+++	50-100 IU/ml	High concentration of Allergen Specific IgE Antibody	Strong colored line	Frequent clinical symptoms
6		>100 IU/ml			

ACON Laboratories, Inc.
5850 Oberlin Drive, #340, San Diego, CA 92121, USA
Tel: 1.858.875.8000
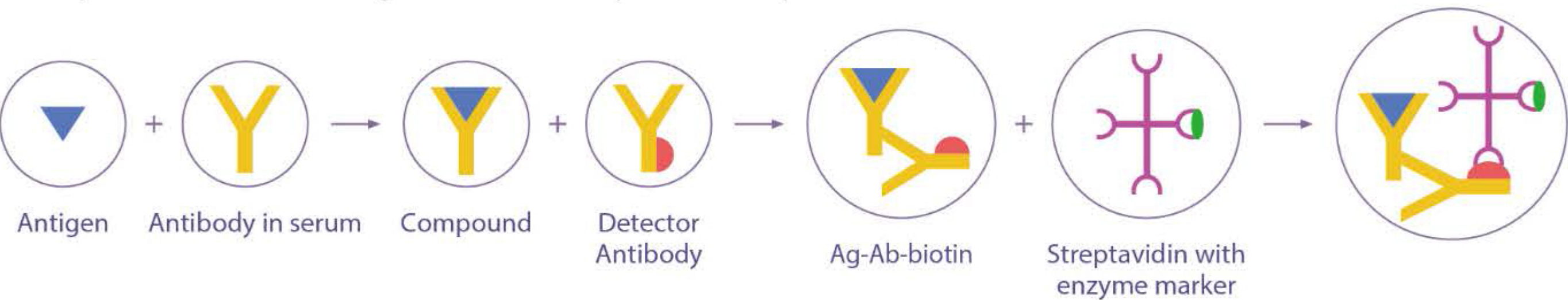**Fax:**1.858.200.0729
Email: info@aconlabs.com

aconlabs.com

» Commonly applicable diseases

Mainly involves eye mucosa, nose mucosa, skin mucosa, gastric mucosa, tracheal mucosa and so on.

Otolaryngology — Sinusitis, allergic rhinitis, hay fever, otitis media, eyelid inflammation, conjunctivitis

Respiratory department — Hay fever, bronchial asthma, chronic bronchitis, cough, pneumonia

Dermatology — Urticaria, atopic dermatitis, contact dermatitis, eczema

Gastroenterology — Indigestion, nausea, vomiting, intestinal dryness, diarrhea, constipation, bloating, stomach, ulcers

» *Foresight*® Allergen Test Kit

Principle of immunoblotting with biotin-streptavidin amplification methode

Antigen + Antibody in serum → Compound + Detector Antibody → Ag-Ab-biotin + Streptavidin with enzyme marker →

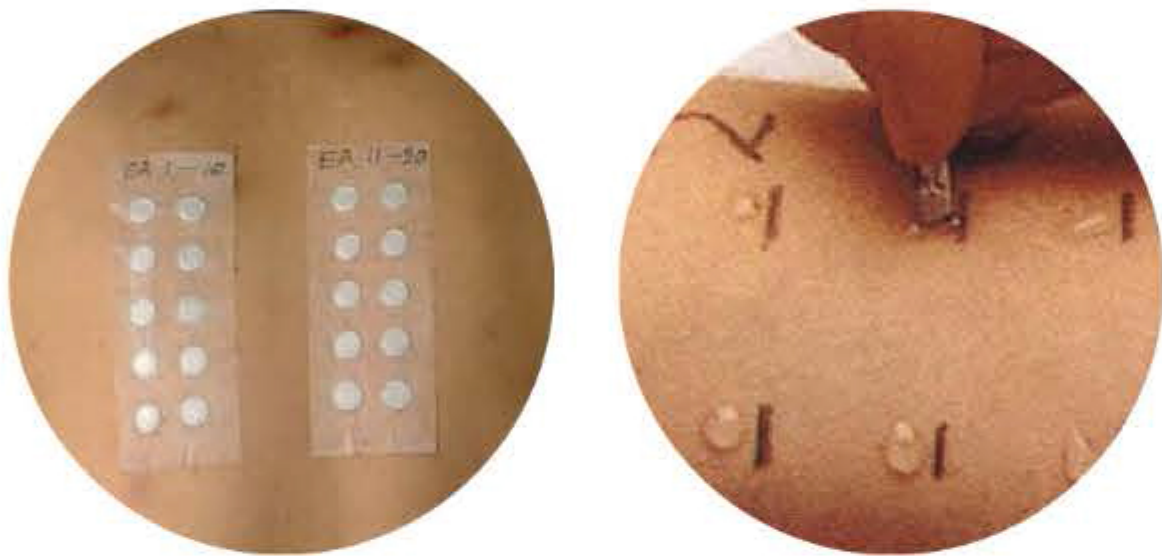| Test items	8 differents panels							
	Combined 1	Combined 2*	Combined 3*	Combined 4*	Food 1*	Food 2*	Inhalation 1*	Inhalation 2*
Derm.pteronyssinus, Derm.farinae	√	√	√	√			√	√
Dust	√	√	√				√	
Cat dander	√	√	√				√	√
Dog dander	√	√	√	√			√	√
Mix tree (white oak, elm, sycamore, willow, cottonwood)	√	√	√	√			√	√
Mould (penicillium notatum, cladosporium herbarum, aspergillus fumiigatus, alternaria alternata)	√	√	√	√			√	√
Cockroach	√	√	√				√	√
Japanese hop	√	√	√				√	√
Amaranth	√	√	√				√	
Mugwort	√	√	√				√	
Short ragweed	√	√	√				√	
White mulberry	√	√		√			√	√
Mix grass (Kentucky bluegrass, Festuca, redtop, cultivates rye, timothy grass, sweet vernal grass)	√						√	
Egg white	√	√	√	√	√	√		
Milk	√	√	√	√	√	√		
Mutton	√	√	√		√	√		
Beef	√	√	√	√	√	√		
Marine fish (gadus, lobster, scallop)	√	√	√		√			
Trout	√		√		√			
Shrimp	√	√	√		√			
Crab	√	√	√	√	√	√		
Shellfis	√							
Peanut	√				√			
Soybean	√	√		√	√	√		
Cashew nut	√		√					
Mango	√	√		√	√	√		
Pinapple	√	√			√			
Wheat	√	√	√	√	√	√		

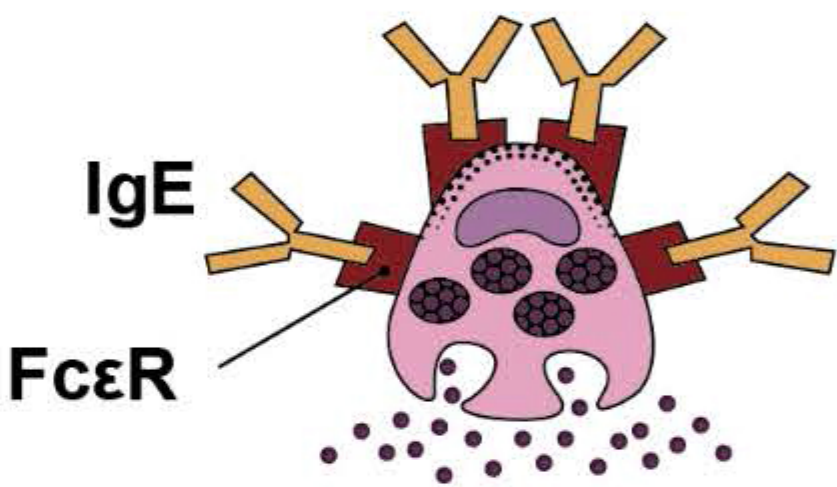*coming soon

» Allergic diseases

Allergies, also known as allergic diseases, are a number of conditions caused by hypersensitivity of the immune system to typically harmless substances in the environment. These diseases include hay fever, food allergies, atopic dermatitis, allergic asthma, and anaphylaxis. The severity of allergies varies from person to person and can range from minor irritation to anaphylaxis- a potentially life-threatening emergency. Early diagnosis and avoiding exposure to the corresponding allergens are currently effective prevention methods.

» Overview of allergy diagnosis

The diagnosis of allergies, or allergic disease, is based on a combination of the person's clinical history, family history, physical examination and laboratory tests. Laboratory tests include skin tests and blood tests. Skin tests are also known as SPTs (skin prick tests), while blood tests are mostly includes total IgE tests and specific IgE tests.

In vivo testing

IgE
FcεR

In vitro testing

Comparing with in vivo tests, in vitro tests are safer and more reliable. In vitro tests become the more and more common diagnostic methods.

	In vivo tests	In vitro tests
Safety	May cause allergic reaction High risk	Detect specific IgE in serum Low risk
Test range	Cannot detect food allergens	Can detect several allergens in one test, great repeatability
Specificity	Some allergens cause skin irritation, high false positive rate	High specificity and good sensitivity
Incidence period	Extensive skin lesions cannot be detected	No affected by skin lesions
Medication	Taking anti-histamines and immunosuppressants cannot be detected	No affected by medication