HITACHI
Inspire the Next

TECHNOLOGY IN ACTION

Fugen
BIOMED

OPTIGEN®

ALLERGEN-SPECIFIC IgE ASSAY

Helping the medical community provide quality and affordable allergy care.

MAST Optigen Allergy System

Advantages

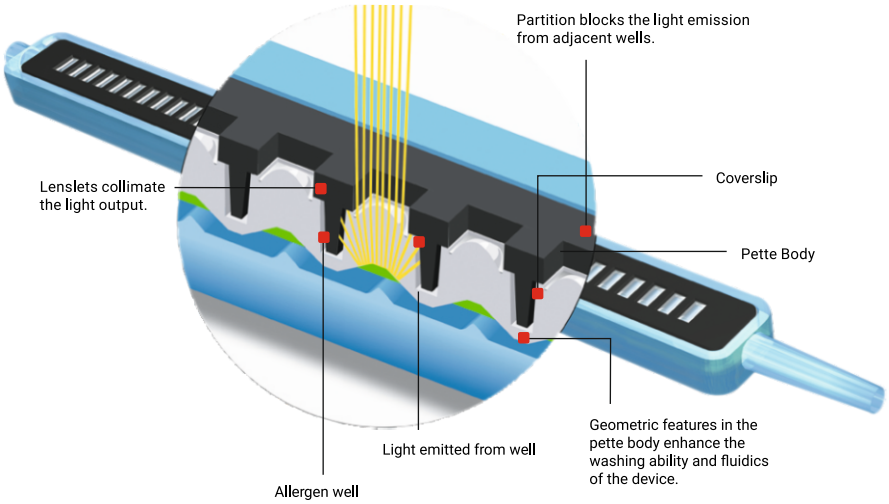
- Detection of multiple allergens in single test device (panel format) offers unmatched cost effectiveness and convenience
- Allergens used are well-characterised and standardised, enhance accuracy of final results
- Rapid test procedure, which shortens the therapeutic turn-around time
- Simple and user friendly procedures, decreases dependability on skilled manpower
- Test panel designed with computerised algorithm for fluid dynamic, reduce sample requirement more than 30 allergens, maximises patient comfort during diagnostic process.

OPTIGEN® PETTE

The fundamental component of the system is a pette, a small plastic device contains a Polystyrene Solid Phase, integrated lenslet and arrays of micro wells for exposure of patient serum to more than 30 different allergens as well as internal positive and negative control, all using a single blood sample.

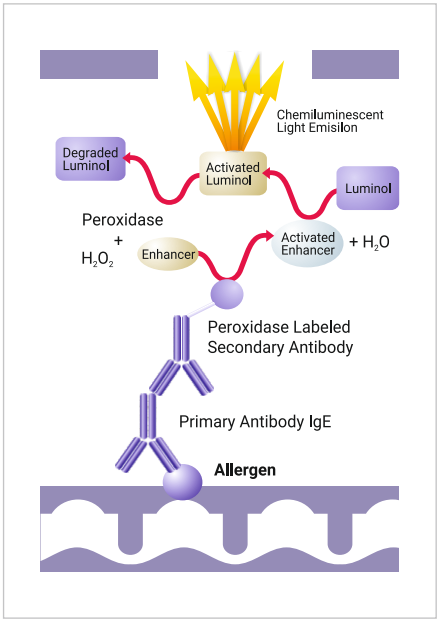
Advantages

- Simultaneously measure more than 30 different allergens using single serum sample
- Designed with computerized fluid dynamic model which facilitate uniform binding of serum IgE to specific allergens
- Consists of three injected molded parts; Pette body, cover slip and a partition which ensures maximum columniation of light to achieve high sensitivity and reliability of results
- Requires very low sample volume of 500 µL



Hitachi holds patents on the OPTIGEN® pettes

Chemiluminescence Assay



Principle

Allergen specific IgE antibody present in the serum binds to allergen coated well, when exposed to different allergens in test chamber (pette), which further bind with anti-IgE conjugate. In next step, photoreagent mixture (Luminol) combines with it and gives off a chemically generated light (i.e. Chemiluminescence). The amount of light liberated is directly proportional to the amount of allergen specific IgE in sample. In between washing steps, minimize non-specific reactions and ensures accuracy of results.

Advantages

- High analytical sensitivity and good linearity
- Superior performance in the detection of low concentration of specific IgE
- Broad analytical range
- Cost effective

CLA-1™ Luminometer

Measures the amount of chemiluminescent light emitted by each allergen well coated with individual allergen.

Advantages

- Compact bench top design
- Can read up to five panels or 180 allergens, in less than ten minutes
- Inbuilt printer prints a complete report that lists the tested allergen and the severity of the patient response to each allergen
- Simple and user friendly operation
- Low maintenance
- FDA-cleared and CE-marked, it has shown consistent, reliable performance in laboratories around the world

CLA-1 Luminometer is a state-of-the-art patented device

Test result are reported and printed in semi-quantitative value and the allergy severity is reported in four classes from 0 to 4.

Class	Net LU*	Levels of antibodies detected Allergen-Specific IgE Concentration
4	>242	Very High levels of antibodies
3	143-242	High levels of antibodies
2	66-142	Moderate levels of antibodies
1	27-65	Low levels of antibodies
0	0-26	No antibodies detected

*Luminescence Unit

Class values of 1 or above represent progressively increasing concentrations of allergen-specific antibodies. Class 0 represents an absence of or non-detectable levels of allergen-specific antibodies.

Work station

Manual

Work station includes pette rack for incubation, waste reservoir, wash buffer container and dispenser pump. These accessories provide complete platform to carry out the entire assay procedure.

Features

Washing of test device with dispenser pump maintains uniform pressure which completely removes the unbound antibodies, ensures accuracy of results

Hitachi Quality

OPTIGEN® allergy test ensures reliability of final results by maintaining quality checks at various level.

Quality of Allergen

Hitachi Chemical Diagnostics uses characterised and standarised allergens, which minimise discrepancies in the results seen between different *in-vitro* diagnostic methods and skin testing as well as ensuring a high reliability and consistency of results

Pette and Reagents

- Procedure control (positive control) and negative blanking (negative control) wells in each pette ensures the accurate performance of assay

CLA-1 Luminometer

- Automatic self diagnosis, at the time of power on to ensure electronic mechanism functionality
- External electronic control cassette is provided with each system to check performance of detection system

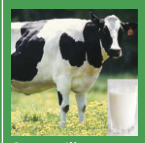
Automated: Hitachi AP 720S

for high workload laboratories

- 20 Test position, process up to 720 allergens / run
- Easy to use with touch screen operation
- Removes most operator-critical steps

OPTIGEN® Express Panel Allergens

Veg. Food


Cow milk


Garlic


Wheat


Tomato


Soybean


Corn


Sesame seed


Rice

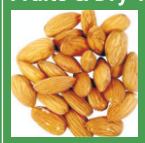

Potato


Peanut


Pea green


Onion

Fruits & Dry-fruits


Almond


Walnut


Orange


Banana

Non-veg. Food


Egg whole


Chicken


Salmon

Trees Pollen and Grass


Eucalyptus


Bermuda grass

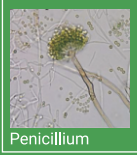

Acacia longleaf

Fungus & Spores


Alternaria


Aspergillus

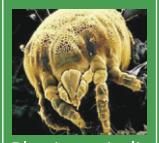

Cladosporoium


Penicillium


Yeast


Candida

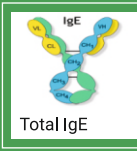
House dust, Insect, Mites & Dog dander


Blomia tropicalis


House dust


Dog dander


Mites P. & Mittes F.



Total IgE


Latex

Manufactured By:

HITACHI
Inspire the Next

Studsvik
SE-611 82
Nyköping

Marketed In India By:

Fugen BIOMED

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Ver. 1.1 030119

*Product specification and feature may change without priore intimation