



# Allergen Specific IgE

## Synonyms

## Clinical Indication

## RAST

The demonstration of allergen specific IgE (Ag-IgE) in serum provides objective evidence for presence of specific antigens which may be responsible for allergic problems.

In most cases of moderate and severe hypersensitivity the diagnosis and identification of relevant antigens can be made on clinical grounds alone. Ag-IgE tests are of value in situations where genuine clinical doubt exists.

Skin Prick testing is the first line investigation for many cases of suspected allergy, however there may be clinical situations where Specific IgE may be considered:

- History of previous anaphylaxis following antigen exposure
- Dermatographism
- Extensive eczema
- Very young children
- Suspected sensitivities to some foods
- Bee and wasp venom sensitivity
- Patients receiving anti-histamine therapy
- Suspected occupational allergy
- Suspected latex allergy (latex allergy testing guidelines available)
- Patient history, examination and, if necessary a diary are important for correct interpretation of results e.g food and symptom diary

Clinical Scenario	Suggested allergens
Asthma - perennial	House Dust Mite (HDM), cat, dog
Asthma - perennial but worse at night	HDM, cat, dog, mixed feathers
Seasonal rhinitis or conjunctivitis	HDM, cat, dog, mixed grass/tree pollens
Eczema	HDM, mixed foods
Peanut allergy	Peanut, mixed nuts
Insect venom anaphylaxis	Bee and wasp venom

Screening may be done using standardised allergen mixes e.g. Food mix - cow's milk, egg white, fish (cod), wheat, peanut and soya; Inhalant allergen mix - grasses, trees, moulds, HDM, pets.

A pollen count calendar is available which shows an average pattern of release of the main allergenic pollen throughout the year.

Do not use blood testing for serum specific immunoglobulin E (IgE) to diagnose drug allergy in a non-specialist setting.

Please clearly state the allergen testing that is required based on your patients symptoms and clinical history. Please do not request 'RAST'. There are over 500 specific allergens available and testing must be guided by clinical history.

<b>Part of Profile / See Also</b>	
<b>Request Form</b>	Combined Pathology manual Blood form with an accompanying allergy questionnaire or an ICE request
<b>Availability / Frequency of Analysis</b>	On request.
<b>Turnaround Time</b>	2 weeks
<b>Patient Preparation</b>	None required
<b>Sample Requirements</b>	
<b>Specimen Type</b>	Serum
<b>Volume</b>	A minimum of 1-2 mL is required depending on number of IgE specific allergen tests requested.
<b>Container</b>	 Yellow top (SST) tube
	Or  Paediatric lithium heparin (Orange top – Sarstedt). If more than two specific allergen tests are required then please send 2 orange top bottles.
<b>Reference Range &amp; Units</b>	See interpretation
<b>Interferences</b>	n/a
<b>Interpretation &amp; Clinical Decision Value (if applicable)</b>	<p>The finding of a positive <b>specific IgE</b> test does not indicate that any particular antigen is responsible for the patient's symptoms and interpretation must be in the context of a full allergic history. Moreover, the absence of <b>specific IgE</b> in serum does not exclude IgE involvement since, particularly in allergic rhinitis, local synthesis and mast cell sensitisation of IgE can occur in the absence of detectable serum <b>specific IgE</b>.</p> <p>Please note that the test will be negative in cases of non-IgE mediated hypersensitivity.</p>
<b>References</b>	
<b>Test code</b>	IGE
<b>Lab Handling</b>	Member of staff assigned to the Allergy bench at the Hub is responsible for locating all IgE samples after a total IgE is available (whether or not specific allergens have been added). A trained member of staff will add specific allergens to each request as appropriate on a daily basis. Samples can then be tested for the relevant specific allergens. Requests that do not clearly indicate the required allergens will be saved and a comment added to prompt the requesting clinician to contact the laboratory if any further allergen testing is required. All samples will be saved for one month following analysis.