
Lab Dept: Chemistry

Test Name: IGE (IMMUNOGLOBULIN E) (PATIENTS <1 YEAR)

General Information

Lab Order Codes: IGEM

Synonyms: Immunoglobulin E

CPT Codes: 82785 – Gammaglobulin; IgE

Test Includes: IgE concentration reported in kU/mL.

Logistics

Test indications: Evaluation of patients with suspected diseases associated with elevations in total immunoglobulin E (IgE), including allergic disease, primary immunodeficiencies, infections, malignancies, or other inflammatory diseases.

Diagnostic evaluation of patients with suspected allergic bronchopulmonary aspergillosis.

Identification of candidates for omalizumab (anti-IgE) therapy.

Lab Testing Sections: Chemistry - Sendouts

Referred to: Mayo Clinic Laboratory (Mayo Test: IGE)

Phone Numbers: MIN Lab: 612-813-6280

STP Lab: 651-220-6550

Test Availability: Daily, 24 hours

Turnaround Time: 1 – 2 days

Special Instructions: N/A

Specimen

Specimen Type: Blood

Container: SST (Gold, marble) OR Red NO GEL

Draw Volume: 3 mL (Minimum: 1 mL) blood

Processed Volume:	1 mL (Minimum: 0.3 mL) serum
Collection:	Routine blood collection
Special Processing:	Lab Staff: Centrifuge specimen, remove serum aliquot into a screw-capped plastic vial. Store and ship at refrigerated temperatures.
Patient Preparation:	None
Sample Rejection:	Mislabeled or unlabeled specimens

Interpretive

Reference Range:	Age	Reference Range (kU/mL)
	0 – 5 months:	< or =13
	6 – 11 months:	< or =34
	1 – 2 years:	< or =97
	3 years:	< or =199
	4 – 6 years:	< or =307
	7 – 8 years:	< or =403
	9 – 12 years:	< or =696
	13 – 15 years:	< or =629
	16 – 17 years:	< or =537
	18 years - Adult	< or =214
	<p>Elevated concentrations of total immunoglobulin E (IgE) may be found in a variety of clinical diseases including allergic disease, certain primary immunodeficiencies, infections, inflammatory diseases, and malignancies.</p> <p>Elevated total IgE concentrations may be consistent with a diagnosis of allergic bronchopulmonary aspergillosis, provided other laboratory and clinical criteria are fulfilled.</p> <p>Total IgE concentrations between 30 to 700 KU/L may identify candidates for omalizumab therapy and may help to determine proper therapeutic dosing</p>	

Critical Values: N/A

Limitations:

An elevated concentration of total immunoglobulin E (IgE) is not diagnostic for allergic disease and must be interpreted in the clinical context of the patient including age, gender, travel history, potential allergen exposure, and family history.

A normal concentration of total IgE does not eliminate the possibility of allergic disease. In patients with a high index of suspicion for allergic disease, testing for allergen-specific IgE may be warranted.

The probability of finding an increased level of total IgE in serum in a patient with allergic disease varies directly with the number of different allergens to which the patient is sensitized.

Normal levels of total IgE in serum occur in some patients with allergic disease, especially if there is sensitivity to a limited number of allergens and limited end organ involvement.

Methodology:

Fluorescence Enzyme Immunoassay (FEIA)

References:

[Mayo Clinic Laboratories](#) (December 2020)