



### Immunoglobulin D (Ig D)

- Ig D consists of two light chains and two heavy chains
- It is found associated with the surface by B-lymphocytes along with Ig M and act as antigen receptor
- Half life – 2 to 8 days. Serum – 0 to 0.04 mg/ml

### Immunoglobulin E (Ig E)

- Ig E consists of two light chain and two heavy chains
- It plays a major role in immediate allergic reaction (anaphylactic).
- The Fc part of IgE interact on mast cells, which results in degranulation with the release of vaso active amines
- In individuals with allergic conditions, Ig E concentration is greatly increased and appear in external secretions
- Half life - 2 to 3 days. Serum - 0.00003 mg/ml

### TYPES OF HYPERSENSITIVITY REACTIONS

<b>Type I:</b>	<b>Classical immediate hypersensitivity</b> (e.g. Allergic Asthma, Allergic rhinitis, Food & Drug Allergies, Insect bites, etc.)
<b>Type II:</b>	<b>Cytotoxic hypersensitivity</b> (e.g. Autoimmune Hemolytic Anemia, etc. )
<b>Type III:</b>	<b>Immune-complex mediated hypersensitivity</b> (e.g. SLE, RA, etc. )
<b>Type IV</b>	<b>Cell mediated (delayed) hypersensitivity</b> (e.g. Tuberculin (Montoux) reaction, etc.)