

Glossary – Introduction to immunology

Adaptive/Acquired immunity - is the response of antigen-specific lymphocytes to antigen, including the development of immunological memory

Antibody (Ab) – also known as immunoglobulin, a protein produced by immune cells (plasma cells) to bind to specific antigens.

Antigen (Ag) – any molecules/ cellular structures that induce immune responses; usually from foreign material but may derive from our own tissues.

Antigen receptors – specific proteins on cell surface of lymphocytes to interact with antigens and transduce intracellular signals for cell activation

Cell-mediated immunity – usually refer to T cell mediated immune responses

Chemokines – small protein molecules that can cause migration of cells

Chemotaxis – migration and activation of cells in response to concentration gradient of **chemokines** (chemoattractant proteins)

Complements - set of plasma proteins that act together to attack extracellular forms of pathogens

Cytokines - proteins made by cells that affect the behavior and development of other cells.

Epitope – antigenic determinant, a site on an antigen recognized by antigen recognition receptor of lymphocytes

Hematopoietic stem cells – hematopoietic means “blood making”; these are bone marrow progenitor cells that give rise to all blood and immune cell lineages

Humoral immunity – antibody-mediated immune responses

Immune responses – cellular and molecular events that defend the host against pathogens / adverse events

Immune system – cells in our bone marrow, thymus, and the lymphatic system of ducts and nodes, spleen, and blood that function to protect us.

Immunogenicity – ability to induce either humoral and/or cell-mediated immune responses

Immunological tolerance – failure to mount an immune response to certain antigens e.g. our body have tolerance to self proteins and normal microflora in gut

Immunology – the study of all aspects of host defense against infection and of adverse consequences of immune responses.

Innate immunity – natural immunity present without prior sensitization of antigens; nonspecific immune responses

Leucocytes/leukocytes – white blood cells

Phagocytes – specific immune cells that are capable of killing of pathogens or removal of cell debris by phagocytosis (a cellular process of ingestion and digestion)

Vasodilation – dilation of blood vessels