

CELLS OF THE IMMUNE SYSTEM

FILL IN THE BLANKS:

- _____ are immature, unselected T cell precursors found within the thymus.
- _____ are antigen presenting cells of the adaptive immune system that express MHC class II molecules and are predominantly associated with B cell stimulation and cytokine secretion. They are also known as Th cells.
- _____ refer to myeloid-derived leukocytes involved in innate immune responses against parasite infections and allergens. They are categorized as granulocytes.
- _____ are lymphoid-derived cells with similar roles as T cells. The most recently discovered immune cell, they play an important role in mucosal barrier microbial regulation and defense.
- _____ are also known as white blood cells (WBCs).
- Produced in the bone marrow, _____ are essential for blood clot formation. Also known as thrombocytes.
- _____ represent a specialized population of T cells that recognize lipid antigens presented by CD1d.
- Of CD4+ lineage, _____ produce IFN-gamma, IL-2, and TNF-beta and are involved in host defenses against intracellular bacterial and viral pathogens.
- _____ are a type of myeloid-derived innate immune cells characterized as granulocytes; these cells rapidly respond to localized tissue injury and release cytokines to attract macrophages and monocytes.
- _____ are a type of WBC that may reside within tissues or continuously circulate. Upon activation, these cells differentiate into various macrophage subtypes.
- _____, derived from CD4+ T cells, respond against helminths and are associated with allergies.
- _____ are myeloid-derived innate immune cells known as professional antigen presenters; these cells are uniquely capable of inducing naïve T cell activation and differentiation.
- Of CD4+ T cell lineage, _____ respond against extracellular bacteria and fungi.
- _____ are a class of innate immune cells responsible for surveillance, detection, and phagocytosis of foreign material. These cells are derived from bone marrow or embryonic monocytes.
- _____ are a type of memory B cell that secrete antibodies; they usually reside within the bone marrow.
- _____ are a category of myeloid-derived innate immune cells that include mast cells, basophils, eosinophils, and neutrophils.
- _____ refer to differentiated lymphocytes such as plasma cells, cytotoxic (CD8+) T cells, and helper (CD4+) T cells.
- _____ are myeloid-derived innate immune cells categorized as granulocytes. They are responsible for allergic responses and can produce histamines.
- _____ are myeloid-derived innate immune cells characterized as granulocytes. They are large phagocytic cells that engulf pathogens and foreign material.
- _____ refer to a type of WBC that includes B cells, T cells, and natural killer cells.
- _____ are lymphoid derived cells specialized to kill tumor cells and microbial infections; they are classed under the innate immune system.
- _____ refer to a specialized group of T cells known to suppress inflammation and are involved in immune tolerance.
- _____ are large myeloid-derived cells that release platelets.
- Of CD4+ T cell lineage, _____ are a specialized group of cells found mostly within secondary lymphoid organs. They play a role in B cell selection and clonal expansion within lymphoid germinal centers.

WORD BANK:

*Eosinophils T follicular helper cells Th2 cells
Plasma cells Thymocytes Basophils
Th17 cells Dendritic cells
Helper T lymphocytes Innate lymphoid cells
Platelets Monocytes Leukocytes Macrophages
Th1 cells Granulocytes
Lymphocytes Natural killer cells
Mast cells Regulatory T cells Neutrophils
Effector cells Megakaryocytes
Invariant natural killer T cells*

