**BACKGROUND**

Blood consists of a solid component that includes erythrocytes, leukocytes and platelets, and a liquid component known as plasma, which is a buffered solution of proteins and salts. Innate and adaptive immune responses rely on the function of leukocytes, which are nucleated white blood cells that destroy invading cells and remove debris. Innate immunity depends largely on the granulocyte class of leukocytes characterized by the presence of dense cytoplasmic granules. Granulocytes are circulating leukocytes that are derived from myeloid progenitor cells in the bone marrow and include basophils, eosinophils and neutrophils. Basophils are involved in protecting mucosal surfaces and influence vascular permeability. Eosinophils are activated by lymphocytes of the adaptive immune response and promote host defense against parasitic infections. Neutrophils are phagocytic cells and are the most abundant and important type of cell in the innate immune response. The granulocyte class ensures successful immune responses against newly encountered pathogens.

**REFERENCES**


**SOURCE**

Granulocytes (HIS48) is a mouse monoclonal antibody raised against rat bone marrow cells.

**PRODUCT**

Each vial contains 200 µg IgM kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Granulocytes (HIS48) is available conjugated to either phycoerythrin (sc-19613 PE) or fluorescein (sc-19613 FITC), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM.

**RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended:


2) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

**APPLICATIONS**

Granulocytes (HIS48) is recommended for detection of an antigen found on all Granulocytes, also found on cells of the erythoid lineage at various stages of maturation in bone marrow of mouse and rat origin by immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and flow cytometry (1 µg per 1 x 10^6 cells).

**STORAGE**

Store at 4°C. **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.