

# Granulocyte Marker (SPM250): sc-65523

## 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

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## SOURCE

Granulocyte Marker (SPM250) is a mouse monoclonal antibody raised against nuclei from Pokeweed mitogen-stimulated human peripheral blood lymphocytes.

## PRODUCT

Each vial contains 250 µl culture supernatant containing IgG<sub>1</sub> with < 0.1% sodium azide.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## APPLICATIONS

Granulocyte Marker (SPM250) is recommended for detection of Granulocyte Marker of human origin by immunofluorescence (starting dilution to be determined by researcher, dilution range 1:50-1:500) and immunohistochemistry (including paraffin-embedded sections) (starting dilution to be determined by researcher, dilution range 1:50-1:500); also recommended for detection of myeloid leukemias and granulocytic sarcomas, and can be used as a marker of granulocytes in normal tissues or inflammatory processes.

## STORAGE

For immediate and continuous use, store at 4° C for up to one month. For sporadic use, freeze in working aliquots in order to avoid repeated freeze/thaw cycles. If turbidity is evident upon prolonged storage, clarify solution by centrifugation.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.