

Product datasheet for BM4012B

OriGene Technologies, Inc.

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Granulocytes (pan, surface antigen) Mouse Monoclonal Antibody [Clone ID: RK-4]

Product data:

Product Type: Primary Antibodies

Clone Name: RK-4
Applications: FC, IHC

Recommended Dilution: Flow Cytometry: 1/50-1/100.

Immunohistochemistry on Frozen Sections: $0.75~\mu g/ml$ (1/400), Immunohistochemistry on Paraffin Sections (After enzyme digestion).

Suggested Positive Control: Rat spleen, blood smears.

Has been described to work in FACS.

Reactivity: Rat

Host: Mouse Isotype: IgG1

Clonality: Monoclonal

Immunogen: Peritoneal cells.

Specificity: This Monoclonal Antibody BM4012B*RK*-4 detects all Rat Granulocytes in Frozen, and in

Paraffin Embedded Rat tissue sections after enzyme digestion.

The antigen is localized on the cell surface. The epitope has not been further characterized.

The molecular structure of the antigen is not known. It is localized on the cell surface and

stable for paraffin embedding.

Antigen Distribution On Isolated Cells: Only a low percentage of cells from peripheral

blood stains positive.

Positive on peritoneal cells 18h after thioglycollate injection (95% granulocytes).

Negative on peritoneal cells 4 days after thioglycollate injection.

Negative on isolated lymphocytes, monocytes, erythrocytes and platelets.

See Table 1. for details.

Formulation: Stock Solution contains PBS, pH 7.2 with 0.01% Thimerosal as preservative and 10 mg/ml BSA

as stabilizer Label: Biotin

State: Lyophilized purified Ig fraction

Reconstitution Method: Restore with 0.5 ml distilled water.





Concentration: 0.3 mg/ml lgG (after reconstitution)

Purification: Affinity Chromatography

Conjugation: Biotin

Storage: Prior to reconstitution store at 2-8°C.

Following reconstitution store undiluted at 2-8°C for one month

or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.

Stability: Shelf life: one year from despatch.

Background: Granulocytes are a type of white blood cell filled with microscopic granules that are little sacs

containing enzymes, compounds that digest microorganisms. They are part of the innate immune system and have somewhat nonspecific, broad-based activity. They do not respond exclusively to specific antigens, as do B-cells and T-cells. Neutrophils, eosinophils and basophils are all types of granulocytes. They are named by the staining features of their granules in the laboratory: Neutrophils have "neutral" subtle granules; Eosinophils have prominent granules that stain readily with the acid dye eosin; and Basophils have prominent

granules that stain readily basic (non acidic) dyes.

Synonyms: Granulocyte cells

Product images:

Tissue staining:	
RK-4 reaction pattern:	
Tissues tested	Results
Bone marrow	positive on granulocytes positive on granulocyte precursors positive on segmented cells positive on band cells positive on metamyelocytes positive on myelocytes
Lung	negative on alveolar macrophages; interstitial tissues are occasionally positive.
Kidney	negative; on perivascular granulocytes occasionally positive.
Skin	negative; on perivascular granulocytes occasionally positive.
Liver	negative; on perivascular granulocytes occasionally positive.
Blood vessel wall	negative

Table 1. Tissue staining: RK-4 recation pattern