

Product datasheet for **BM4012**

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

Product data:

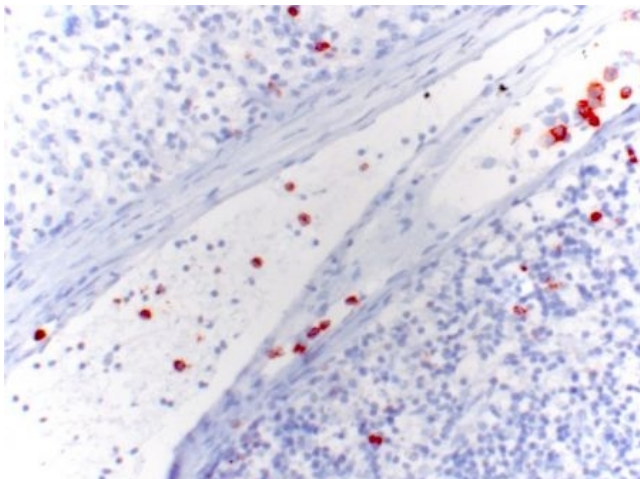
Product Type:	Primary Antibodies
Clone Name:	RK-4
Applications:	FC, IHC
Recommended Dilution:	Immunohistochemistry on Frozen Sections: 1.25 µg/ml (1/400). Immunohistochemistry on Paraffin Sections (After enzyme digestion). <i>Suggested Positive Control:</i> Rat spleen, blood smears. Has been described to work in FACS .
Reactivity:	Rat
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Peritoneal cells.
Specificity:	This Monoclonal Antibody BM4012 <i>RK-4</i> detects all Rat Granulocytes in Frozen Sections. The antigen is localized on the cell surface. The epitope has not been further characterized. 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 5 mg/ml BSA as stabilizer and 0.09% Sodium Azide as preservative State: Purified State: Lyophilized purified Ig fraction
Reconstitution Method:	Restore with 0.5 ml distilled water to make stock solution.
Concentration:	0.5 mg/ml IgG (after reconstitution)
Purification:	Affinity Chromatography
Conjugation:	Unconjugated



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Storage:	<p>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.</p>
Stability:	<p>Shelf life: one year from despatch.</p>
Background:	<p>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.</p>
Synonyms:	<p>Granulocyte cells</p>
Note:	<p>Protocol: <u>Staining procedure for frozen ice-cold acetone-fixed tissue sections:</u> (The whole procedure is performed at room temperature)</p> <ol style="list-style-type: none">1. Wash in PBS2. Block endogenous peroxidase3. Wash in PBS4. Block with 10% normal goat serum in PBS for 30min. in a humid chamber5. Incubate with primary antibody (dilution see datasheet) for 1h in a humid chamber6. Wash in PBS7. Incubate with secondary antibody (peroxidase-conjugated goat anti mouse IgG (H+L) minimal-cross reaction to rat) for 1h in a humid chamber8. Wash in PBS9. Incubate with AEC substrate (3-amino-9-ethylcarbazol) for 12min.10. Wash in PBS11. Counterstain with Mayer's hemalum.

Product images:



BM4012 Granulocytes antibody staining of Rat Spleen Frozen Section.

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 reaction pattern.