



BMA BIOMEDICALS

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Biotinylated Monoclonal Antibody To Rat Macrophages Macrophages and Interdigitating Cells

Monoclonal Antibody RM-1 recognizes a surface antigen of unknown function on monocytes, macrophages, interdigitating cells and their *in vitro* equivalents. The RM-1 antigen is apparently constitutively expressed and can be detected early in the development of macrophages and dendritic cells.

Product number: T-3026

Clone: RM-1, biotinylated

Lot: 01PB1318

TECHNICAL AND ANALYTICAL CHARACTERISTICS:

Host species, isotype: Mouse IgG1

Quantity: 100µg

Format: Affinity purified, biotinylated, lyophilized.
Reconstitute by adding 0.5ml distilled water. This stock solution contains 0.2mg/ml IgG, phosphate buffered saline pH 7.2 (PBS), 5mg/ml bovine serum albumin (BSA) as a stabilizer and 0.05% (v/v) Kathon CG as a preservative.

Stability: Original vial: 1 year at 4° - 8°C
Stock solution or aliquots thereof: 1 year at -20°C. Avoid repeated thawing and freezing.

Applications: Tested for immunohistochemistry (IHC); has been described to work in FACS.

Approximate working dilution for IHC:

Frozen sections: 2µg/ml (1:100)

Paraffin sections: 20µg/ml (1:10); microwave pretreatment for antigen retrieval is recommended.

Optimal dilutions should be determined by the end user.

Suggested positive control: Rat spleen

Please see www.bma.ch for protocols and general information.

Immunogen: Rat peritoneal macrophages

Antigen, epitope: The antigen is localized on the surface of cells. It is stable to 2% periodate-lysine-paraformaldehyde fixation. The epitope has not been further characterized.

Antigen distribution:	<p>Isolated cells: Positive on monocytes in peripheral blood. Positive on 20-30% of peritoneal cells, increasing to 30-40% after thioglycolate stimulation.</p> <p>Tissue sections: The antigen is found on a subpopulation of most tissue fixed macrophages. It is quite predominant on red pulp macrophages and interdigitating cells in the outer periarteriolar lymphatic sheath of the spleen, the inner border of marginal sinus of lymph nodes, and alveolar macrophages. Langerhans cells of the skin and twisted spindle-shaped cells of the omentum are detected by the antibody. It is absent from sinusoidal endothelial cells and parenchymal cells.</p>
Specificity:	<p>Rat: monocytes, subpopulation of macrophages, interdigitating cells.</p> <p>Other species: not tested</p>

Selected references

- TAKEYA, M. et al.: Heterogeneity of rat macrophages recognized by monoclonal antibodies: an immunohistochemical and immunoelectron microscopic study. *J. Histochem Cytochem*: 37: 635-641 (1989)
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- IZUMI, S. et al.: Ontogenic Development of synovial A cells in fetal and neonatal rat knee joints. *Cell Tiss Res* : 262: 1-8 (1990).
- TAKAHASHI K. et al.: Development, Differentiation, and Proliferation of Macrophages in the Rat Yolk Sac. *Tissue and Cell* 25: 351-62 (1993)
- KASPER, M. et al.: Heterogeneous Dolichos biflorus lectin binding to a subset of rat alveolar macrophages in normal and fibrotic lung tissue. *Acta Histochem* 95: 1-11 (1993)
- SOROKIN, S.P. et al.: Factors influencing fetal macrophage development: III. Immunocytochemical localization of cytokines and time-resolved expression of differentiation markers in organ-cultured rat lungs. *Anat. Rec.* 248: 93-103 (1997)

For *in vitro* research only. This product contains Kathon CG as a preservative.