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Biotinylated Monoclonal Antibody To Mouse Mid-Stage Macrophage Precursor Cells

Ly-6C, Late CFU-M, Monoblasts and Monocytes

Monoclonal antibody ER-MP20 is useful for the detection of macrophage precursor cells in mid-stage development (late CFU-M, monoblasts and monocytes). It is ideally suited for the detection of monocytes in bone marrow samples by FACS. ER-MP20 also identifies activated macrophages in inflammatory tissues where the simultaneous use of the murine pan-macrophage marker BM8 (anti F4/80, product T-2006) is recommended. ER-MP20 also detects a wide range of endothelial cells.

This antibody was produced serum-free, without fetal calf serum.

TECHNICAL AND ANALYTICAL CHARACTERISTICS

Product Number:	T-2019 (Lot 05PB1418)
Clone:	ER-MP20
Host species, isotype:	Rat IgG2a
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% Kathon™ CG as a preservative.
Stability:	Original vial: 1 year at 4° - 8°C from date of purchase. Stock solution or aliquots thereof: 1 year at -20°C. pretreatment with Proteinase K for antigen retrieval is recommended
Applications:	Tested for immunohistochemistry (IHC); has also been described to work in FACS.
	Approximate working dilution for IHC: Frozen sections: 0.2µg/ml (1:1000) Paraffin sections: 0.4µg/ml (1:500); pretreatment with Proteinase K for antigen retrieval is recommended Optimal dilutions should be determined by the end user Suggested positive control: Mouse spleen Please see **www.bma.ch** for protocols and general information
Immunogen:	Mouse macrophage cell lines
Protein database:	mouse-Q9Z1Q4

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Antigen, epitope:	The antigen is a glutaraldehyde (0.05%) and paraformaldehyde (1%) resistant 14kD surface protein which is very similar to Ly-6C and may be analogous to human CD59. It is inducible by IFN-alpha, IFN-beta and IFN-gamma.
Antigen distribution:	**Isolated cells:** In bone marrow cells the antigen is found on monoblasts and late CFU-M cells as well as on monocytes. It is also found on granulocytes and a subpopulation of lymphocytes in the peripheral blood. Granulocytic cells show a dull, and monocytic cells a bright antigen surface expression. Lymphoid cells express the antigen only very weakly. Thus, in the bone marrow three useful FACS windows can be defined for cell sorting purposes. **Tissue sections:** The antigen is found on macrophage precursor subpopulations in the bone marrow and haematopoietic islands of the lymphoid organs, and in the spleen. Endothelial cells of small vessels in various organs also stain positive with ER-MP 20. Activated macrophages in inflammatory tissues also express the ER-MP 20-related antigen.
Specificity:	**Mouse:** Macrophage precursor cells, endothelial cells. **Other species:** does not react with porcine tissues.

Selected references

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

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