

Mouse Anti-Human Macrophages/Monocytes, CatNo K026
monoclonal

BatchNo: See Label
Expiration Date: See Label
Storage: 2-8°C

Clone Number:	Mac387
Introduction:	The myeloid/histiocyte antigen recognized by the monoclonal antibody Mac 387 (1) is an abundant cytoplasmic granulocyte protein with a molecular mass of 36 kD (2). It is also present in some other cell types e.g. monocytes, certain reactive tissue macrophages, squamous mucosal epithelium and reactive epidermis (4-6). The protein (2) has several designations among which S100A8/S100A9 indicates that it belongs to the S100 protein family according to the recently established nomenclature for this family (3). The protein contains at least two different subunits which have molecular masses of 8 and 14 kD, respectively. The whole molecule is thus a heterooligomer consisting of two or three subunits (2,3,8).
Volume/Quantity:	0.1 ml
Product Form:	Tissue culture supernatant - liquid
Preparation:	Tissue culture supernatant (RPMI 1640 medium containing fetal calf serum)
Buffer:	0.05 mol/L Tris/HCL pH7.2
Preservatives Stabilisers:	0.09% Sodium Azide (NaN ₃)
Approx. Protein Concentrations:	IgG concentration 1 mg/ml
Immunogen:	Purified peripheral blood monocyte components prepared by affinity chromatography on polyclonal anti-monocyte-Sepharose 6B.
Isotype:	IgG1 (Mouse)
Specificity:	The Mac 387 antibody labels the cytoplasm of many myelomonocytic cells and reacts with a predominating subset of reactive macrophages. A positive reaction is also seen in several cases of histiocytosis both the malignant and the haemophagocytic types (4,7). In blood smears from peripheral blood a positive staining of monocytes and granulocytes, but not lymphocytes, is seen.
Species Cross Reactivity:	Cat, Cow, Dog, Guinea, Pig, Horse, Monkey, Rabbit, Rat and Swine.

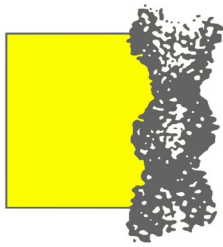
Applications: Suggested Working Dilution

FlowCytometry	Not tested	
Immunohistology-frozen	Yes	1/50 – 1/200
Immunohistology-paraffin	Yes	1/50 – 1/200
Immunohistology-resin	Not tested	
ELISA	Not tested	
Immunoprecipitation	Not tested	
Western Blotting	Not tested	
Radioimmunoassay	Not tested	

Where this antibody has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the antibody for use in their own system using appropriate negative/positive controls.

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Immunohistology

Pre-treatment:	This product requires antigen retrieval using heat treatment prior to staining of paraffin sections with 10 mmol/L citrate buffer pH6.0.
Recommended Secondary Reagents:	F(ab') ₂ rabbit anti-mouse IgG HRP conjugate - (LINARIS CatNo LST0013B) Vectastain [®] ABC Mouse IgG (Vector CatNo AK-5002) and Substrate-Kit e.g. Vector [®] Red (Vector CatNo SK-5100). Vectastain [®] ABC-Elite Mouse IgG (Vector CatNo PK-6102) and Peroxidase Substrate-Kit e.g. DAB (LINARIS CatNo E108) or HistoGreen (LINARIS CatNo E109).
Recommended Negative Controls:	Mouse IgG1 Negative Control (LINARIS CatNo ITC0928)

References

1. Flavell DJ, Jones DB, Wright DH. Identification of tissue histiocytes on paraffin sections by a new monoclonal antibody. J Histochem Cytochem 1987;35:1217-26.
2. Fagerhol MK. Nomenclature for proteins: is calprotectin a proper name for the elusive myelomonocytic protein? J Clin Pathol: Mol Pathol 1996;49:74-9.
3. Schäfer BW, Heizmann CW. The S100 family of EF-hand calcium-binding proteins: functions and pathology. TIBS 1996;21:134-40.
4. Brandtzaeg P, Jones DB, Flavell DJ, Fagerhold MK. Mac 387 antibody and detection of formalin resistant myelomonocytic L1 antigen. J Clin Pathol 1988;41:963-70.
5. Jones DB, Flavell DJ, Wright DH. M4.12. Tissue reactivity of a monoclonal antibody directed against cells of the human monocyte-macrophage lineage in formalin-fixed, paraffin-embedded tissue. In: McMichael AJ et al., eds. Leucocyte Typing III. White Cell Differentiation Antigens. Oxford - New York - Tokyo: Oxford University Press, 1987:692-4.
6. Davey FR, Gatter KC, Ralfkiaer E, Pulford KAF, Krissansen GW, Mason DY. Immunophenotyping of non-Hodgkin's lymphomas using a panel of antibodies on paraffin-embedded tissues. Am J Pathol 1987;129:54-63.
7. Brandtzaeg P, Dale I, Gabrielsen T-Ø. The leucocyte protein L1 (calprotectin): usefulness as an immunohistochemical marker antigen and putative biological function. Histopathology 1992;21:191-6.
8. Siegenthaler G, Roulin K, Chatellard-Gruaz D, Hotz R, Saurat JH, Hellman U et al. A heterocomplex formed by the calcium-binding proteins MRP8 (S100A8)

Storage Conditions:	Store at 2-8°C. DO NOT FREEZE! Should this product contain a precipitate we recommend microcentrifugation before use.
Shelf Life:	12 months from date of despatch.
Health and Safety Information:	(A full Health and Safety assessment is available upon request) This product contains sodium azide: a POISONOUS and HAZARDOUS SUBSTANCE which should be handled by trained staff only.

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For Research purposes only. Not for therapeutic or diagnostic use.

