



BMA BIOMEDICALS

**FITC Labeled Monoclonal Antibody To Human MRP8/14
S100A8/A9, Calprotectin, L1 Protein - Acute Inflammation Marker**

Monoclonal antibody 27E10 is unique in that it recognizes an epitope on the MRP8/14 heterocomplex that is not exposed on the individual subunits MRP8 or MRP14. It is ideally suited for the detection of early inflammatory macrophages and thus for the classification of acute stage inflammation in tissue sections and in smears, the characterization of tumorous tissues and the *in vitro* monitoring of peripheral blood cell cultures. The corresponding MRP8/14 ELISA (product S-1011) has shown great advantages in the early assessment of certain acute inflammatory conditions.

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

TECHNICAL AND ANALYTICAL CHARACTERISTICS

Product Number:	T-1025 (Lot 12PF1909)
Clone:	27E10
Host species, isotype:	Mouse IgG1
Quantity:	200µg
Format:	Affinity purified, FITC labelled, liquid. Supplied as 1ml solution. This stock solution contains 0.2mg/ml IgG, phosphate buffered saline pH 7.2 (PBS), 10mg/ml bovine serum albumin (BSA) as a stabilizer and 0.09% sodium azide as a preservative.
Stability:	Original vial: 1 year at 4° - 8°C from date of purchase. Stock solution and aliquots thereof: 1 year at -20°C. Avoid freeze-thaw cycles.
Applications:	Has been described to work in IHC and in FACS. Approximate working dilution for IHC: Optimal dilutions should be determined by the end user. Suggested positive control: Human monocytes Please see www.bma.ch for protocols and general information.
Immunogen:	Cultured human monocytes
Protein database:	<u>human-P05109</u> , <u>human-P06702</u>
Antigen, epitope:	The antigen is MRP8/14 (calprotectin), the epitope involves parts of both subunits MRP8 and MRP14.

Antigen distribution:

Isolated cells: Monocytes carry the antigen both on the surface and intracellularly, granulocytes exhibit it only intracellularly. Up to 80% of monocytes in early cultures (24-48h) are positive. No reaction has been seen with lymphocytes or platelets.

Tissue sections: The antigen is found in macrophages in the red pulp of the spleen and liver. It is strongly expressed in macrophages from acute inflamed tissues (peridontitis, contact eczema, urticaria, erythrodermia) where some endothelial and epidermal cells may also express this antigen. It is normally absent on resident mononuclear phagocytes in healthy tissues (skin, gut, thymus).

Specificity:

Human: subpopulation of macrophages, monocytes and granulocytes; peripheral blood monocytes carry the antigen extra- and intracellularly, neutrophils only intracellularly.

Other: subpopulation of macrophages of rhesus monkey and bovine tissues. The antibody does not react with swine tissues.

Selected references

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Fruhbeis, B. et al.: Immunolocalization of an angiogenic factor (HAF) in normal inflammatory and tumor tissues. *Int. J. Canc.* 42, 207 - 212 (1988).

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Johne, B. et al.: Functional and clinical aspects of the myelomonocyte protein calprotectin. *J. Clin. Pathol.* 50: 113-123 (1997).

Kiefer, R. et al.: Macrophage differentiation antigens in acute and chronic autoimmune polyneuropathies. *Brain* 121: 469-79 (1998).

For in vitro research only. This product contains sodium azide as a preservative.