
Monoclonal Antibody To Human MRP14 (S100A9)
Calgranulin B - Marker For A Subpopulation Of Inflammatory Leukocytes

Monoclonal antibody S32.2 identifies the Ca²⁺-binding 14kD subunit of the inflammatory L-1 protein complex, also called S100A9 or Calgranulin B. It is useful for the characterization of circulating granulocytes or inflammatory infiltrates of the myelo-monocytic lineage which express MRP14 differently depending on the inflammatory status of the disease.

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

Product number: T-1028

Clone: S32.2

Lot: 05PO1403

TECHNICAL AND ANALYTICAL CHARACTERISTICS:

Host species, isotype:	Mouse IgG1
Quantity:	100µg
Format:	Affinity purified, 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) and 0.05% 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) and ELISA; has been described to work in FACS and dot blots. Approximate working dilution for IHC: Frozen sections: 0.5µg/ml (1:400) Paraffin sections: 1µg/ml (1:200); no pretreatment for antigen retrieval necessary. Optimal dilutions should be determined by the end user. Suggested positive control: Human tonsil. Please see www.bma.ch for protocols and general information.
Immunogen:	Cultured human monocytes.
Antigen, epitope:	The antigen is MRP14, the epitope is suspected in the carboxyterminal portion of the peptide.

Antigen distribution:

Isolated cells: The antigen is found in granulocytes and monocytes. It is absent from other plasma cells. In cultured monocytes, maximum MRP14 expression is found after 3 - 4 days. Myeloid leukaemia cells have been found to be positive as well.

Tissue sections: MRP14 is found in a distinct subpopulation of inflammatory perivascular infiltrates of the myelo-monocytic lineage. Macrophages synthesise MRP14 increasingly during the early stages of inflammation. A high MRP14 (and low MRP8) expression by macrophages was reported in granulomatous diseases such as tuberculosis and sarcoidosis. In non-granulomatous chronic inflammatory diseases like chronic rheumatoid arthritis, MRP8 and MRP14 positive cells consist of different subpopulations. During early inflammation endothelial cells are also positive with MRP8/14 determined by antibody 27E10 (product T-1023).

Specificity:

Human: MRP14, granulocytes, stimulated monocytes and macrophages.

Other: does not react with bovine and swine spleen

Selected references

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