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Biotinylated Monoclonal Antibody To Human MRP14

S100A9, Calgranulin B - Subpopulation Of Inflammatory Leukocytes

Monoclonal antibody S32.2 identifies the Ca^{2+}-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-1029

Clone: S32.2

Lot: 04PB1427

TECHNICAL AND ANALYTICAL CHARACTERISTICS:

Host species, isotype: Mouse IgG1

Quantity: 100µg

Format: Affinity purified from cell culture supernatant, 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: Each lot of this antibody has been tested and validated for immunohistochemistry and ELISA; has also been described to work in FACS and dot blots.
Approximate working dilution for IHC:
Frozen sections: 0.25µg/ml (1:800)
Paraffin sections: 2µg/ml (1:100); 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 all other blood 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 sarcoidis. 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 as a preservative.