
Monoclonal Antibody To Human MRP8 (S100A8)
Calgranulin A - Marker For A Subpopulation Of Inflammatory Leukocytes

Monoclonal antibody 8-5C2 identifies MRP8 (also named S100A8 or Calgranulin A), the Ca²⁺-binding light subunit of the inflammatory L-1 protein complex. MRP8 forms Ca²⁺ dependent dimers or complexes with MRP14 (S100A9, Calgranulin B). It also forms disulfide-linked homodimers under the influence of hypochlorite, a process thought to abrogate the chemotactic property of MRP8. The antibody is useful in various immunological techniques. Histological and serological data indicate that MRP8 is associated with chronic stages of inflammatory diseases.

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

Product number: T-1030

Clone: 8-5C2

Lot: 06PO1413

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) as a stabilizer 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: Each lot of this antibody has been tested and validated for immunohistochemistry (IHC) and ELISA; has also been described to work in dot blots, not in FACS.

Approximate working dilution for IHC:

Frozen sections: 0.5µg/ml (1:400)

Paraffin sections: 2µg/ml (1:100); no pretreatment for antigen retrieval necessary; microwave treatment in 0.01M citrate pH 6.0 may enhance the reactivity.

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 MRP8, the epitope is suspected in the central portion of the peptide.

Antigen distribution:

Isolated cells: The antigen is found in granulocytes and monocytes but not in other blood cells. In cultured monocytes, maximum MRP8 is expressed after 3 - 4 days. Myeloid leukaemia stain positive.

Tissue sections: MRP8 is found in a distinct subpopulation of inflammatory perivascular infiltrates of the myelo-monocytic lineage. Macrophages synthesise MRP8 increasingly during the late stages of inflammation. A low MRP8 (and high MRP-14) expression by macrophages was also reported in granulomatous diseases such as tuberculosis and sarcoidosis. In non-granulomatous chronic inflammatory diseases such as chronic rheumatoid arthritis or chronic rejection after allograft transplantation, MRP8 and MRP14 positive cells consist of different subpopulations.

Specificity:

Human: MRP8 in stimulated monocytes and macrophages in late phase or chronic inflammation.

Other: The antibody reacts with bovine spleen but does not react with rat tissues. It shows a diffuse reaction with swine spleen.

Selected references

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For *in vitro* research only. Caution: this product contains Kathon.