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

Monoclonal antibody S36.48 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.

Product Number: T-1026 (Lot 04PO9411)

Clone: S36.48

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), 10mg/ml bovine serum albumin (BSA) as a stabilizer and 0.01% thimerosal 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); Proteinase K pretreatment for antigen retrieval is recommended.

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 central region 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: The antibody reacts with bovine spleen. It does not react with swine tissues.

Selected references

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For *in vitro* research only. Caution: this product contains thimerosal, a poisonous and hazardous substance.