Peninsula Laboratories, LLC

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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.

Product Number:	T-1029
Clone:	S32.2
Host species, isotype:	Mouse IgG1
Quantity:	100μg
Format:	Affinity purified, 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 Kathon 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: 0.25μg/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.
Immunogen:	Cultured human monocytes.
Antigen, epitope:	The antigen is MRP14, the epitope is suspected in the carboxyterminal portion of the peptide.

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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: not tested.

Selected references

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Sorg, C.: Macrophages in Inflammation. Regensberg & Biermann. ISBN 3-924469-23-7: 23-35 (1988).

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