



## Peninsula Laboratories, LLC

A Member of the Bachem Group

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### Monoclonal Antibody To Human MRP14 (S100A9) Calgranulin B - Marker For A 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.

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<b>Product Number:</b>	T-1028
<b>Clone:</b>	S32.2
<b>Host species, isotype:</b>	Mouse IgG1
<b>Quantity:</b>	100 $\mu$ g
<b>Format:</b>	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) and 0.05% Luviskol as a stabilizer and 0.01% thimerosal as a preservative.
<b>Stability:</b>	Original vial: 1 year at 4° - 8°C  Stock solution or aliquots thereof: 1 year at -20°C. Avoid repeated thawing and freezing.
<b>Applications:</b>	Tested for immunohistochemistry (IHC) and ELISA; has been described to work in FACS and dot blots.  <b>Approximate working dilution for IHC:</b> Frozen sections: 0.5 $\mu$ g/ml (1:400) Paraffin sections: 1 $\mu$ g/ml (1:200); no pretreatment for antigen retrieval necessary.  Optimal dilutions should be determined by the end user. Suggested positive control: Human tonsil.
<b>Immunogen:</b>	Cultured human monocytes.
<b>Antigen, epitope:</b>	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 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:** not tested.

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### 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. Caution: this product contains thimerosal, a poisonous and hazardous substance.