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Product datasheet for BM4026

S100A9 Mouse Monoclonal Antibody [Clone ID: S36.48]

Product data:

Product Type:	Primary Antibodies
Clone Name:	S36.48
Applications:	ELISA, FC, IHC
Recommended Dilution:	**ELISA.** **Immunohistochemistry on Frozen Sections:** 0.25 µg/ml (1/800). **Immunohistochemistry on Paraffin Sections:** 1 µg/ml (1/200). Proteinase K pre-treatment for antigen retrieval is recommended. ***Suggested Positive Control:*** Human tonsil. Has been described to work in**FACS** and **Dot Blots**.
Reactivity:	Human
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Cultured Human monocytes.
Specificity:	Human MRP14, Granulocytes, stimulated Monocytes and Macrophages: This clone 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. **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 leukaemic cells have been found to be positive as well. ***Tissue Sections:*** MRP-14 is found in a distinct subpopulation of inflammatory perivascular infiltrates of the myelo-monocytic lineage. Macrophages synthesise MRP-14 increasingly during the early stages of inflammation. A high MRP-14 (and low MRP-8) 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 *Cat.-No* BM4025).

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Formulation:	PBS, pH 7.2 containing 5 mg/ml BSA as a stabilizer and 0.05% (v/v) Kathon CG as a preservative State: Purified State: Lyophilized purified IgG fraction from cell culture supernatant
Reconstitution Method:	Restore in 0.5 ml distilled water to a concentration of 0.2 mg/ml
Concentration:	0.2 mg/ml (after reconstitution)
Purification:	Affinity Chromatography
Conjugation:	Unconjugated
Storage:	Store lyophilized at 2-8°C for 6 months or at -20°C long term. After reconstitution store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C long term. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Gene Name:	S100 calcium binding protein A9
Database Link:	Entrez Gene 6280 Human P06702
Background:	S100A9 is a member of the S100 family of proteins. S100A9, together with S100A8 forms a heterodimeric protein complex, Calprotectin, which is a major calcium- and zinc-binding protein in the cytosol of neutrophils, monocytes, and keratinocytes. Complexes of S100A8 and S100A9 are the physiologically relevant forms of these proteins. S100A9 may function in the inhibition of casein kinase and altered expression of this protein is associated with the disease cystic fibrosis. Its expression and potential cytokine-like function in inflammation and in cancer suggest that S100A8/A9 may play a key role in inflammation-associated cancer.
Synonyms:	S100-A9, CAGB, MRP-14

Note:

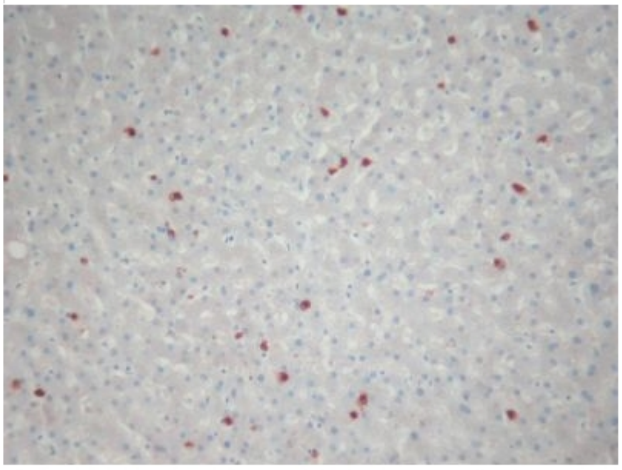
Protocol: **Protocol with Frozen, ice-cold Acetone-Fixed Sections:**
(The whole procedure is performed at room temperature)

1. Wash in PBS
2. Block endogenous peroxidase
3. Wash in PBS
4. Block with 10% normal goat serum in PBS for 30min. in a humid chamber
5. Incubate with primary antibody (dilution see datasheet) for 1h in a humid chamber
6. Wash in PBS
7. Incubate with secondary antibody (peroxidase-conjugated goat anti mouse IgG+IgM (H+L) minimal-cross reaction to human) for 1h in a humid chamber
8. Wash in PBS
9. Incubate with AEC substrate (3-amino-9-ethylcarbazol) for 12min.
10. Wash in PBS
11. Counterstain with Mayer's hemalum

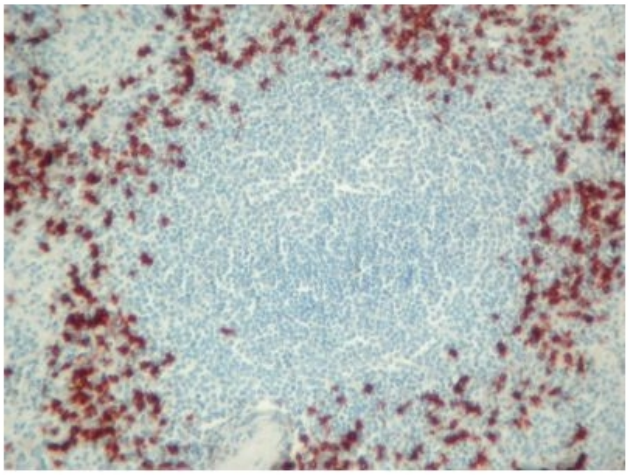
Protocol with Formalin-Fixed, Paraffin-Embedded Sections:
(The whole procedure is performed at room temperature)

1. Deparaffinize and rehydrate tissue section
2. Incubate the tissue section with proteinase K for 7min.
3. Wash in distilled water
4. Block endogenous peroxidase
5. Wash in PBS
6. Block with 10% normal goat serum in PBS for 30min. in a humid chamber
7. Incubate with primary antibody (dilution see datasheet) for 1h in a humid chamber
8. Wash in PBS
9. Incubate with secondary antibody (peroxidase-conjugated goat anti mouse IgG+IgM (H+L) minimal-cross reaction to human) for 1h in a humid chamber
10. Wash in PBS
11. Incubate with AEC substrate (3-amino-9-ethylcarbazol) for 12min.
12. Wash in PBS
13. Counterstain with Mayer's hemalum

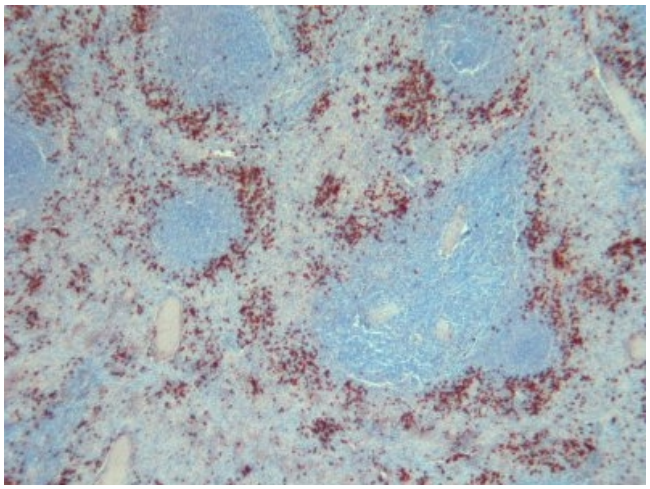
Product images:



Immunohistochemical staining on Human Liver Paraffin Sections using S100A9 antibody clone S36.48



Immunohistochemical staining on Human Spleen Paraffin Sections using S100A9 antibody clone S36.48.



Immunohistochemical staining on Human Spleen Paraffin Sections using S100A9 antibody clone S36.48