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Product datasheet for BM4025X

MRP8/14 (S100A8/A9) Mouse Monoclonal Antibody [Clone ID: 27E10]

Product data:

Product Type:	Primary Antibodies
Clone Name:	27E10
Applications:	ELISA, IHC
Recommended Dilution:	**ELISA.** **Immunohistochemistry on frozen sections:** 0.25 µg /ml **Immunohistochemistry on Paraffin sections**: 1 µg/ml (Proteinase K pretreatment for antigen retrieval is recommended). ***Fixation****:* Acetone, Formalin/Paraffin. Suggested positive control: Human tonsil.
Reactivity:	Human
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Cultured Human monocytes.

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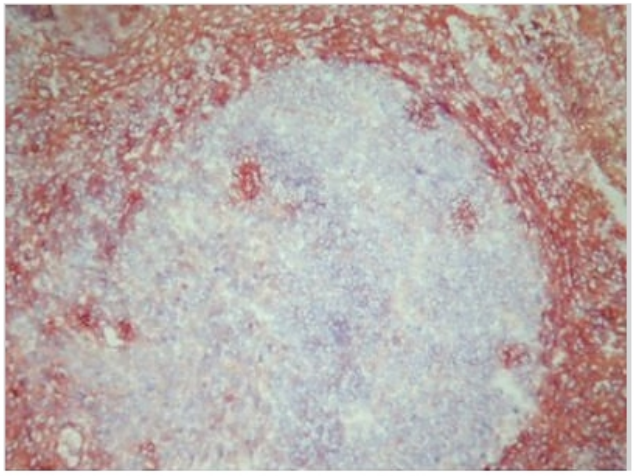
Specificity:	This monoclonal *27E10* antibody is ideally suited for the detection of early inflammatory macrophages and thus for the classification of acute stage inflammation in tissue sections and in smears, the characterization of tumorous tissues and the in vitro monitoring of peripheral blood cell cultures. Clone *27E10* is unique in that it recognizes an epitope on the MRP8/14 heterocomplex that is not exposed on the individual subunits MRP8 or MRP14. The antibody reacts with Human subpopulations of macrophages, monocytes and granulocytes; peripheral blood monocytes carry the antigen extra- and intracellularly, neutrophils only intracellularly. ***Antigen Distribution*** **Isolated Cells:** A subpopulation of monocytes and neutrophilic granulocytes are positive. Monocytes carry the antigen both on the surface and intracellularly, granulocytes exhibit it only intracellularly. Up to 80% of monocytes in early cultures (24-48h) are positive. No reaction has been seen with lymphocytes or platelets. **Tissue Sections:** The antigen is found in macrophages in the red pulp of the spleen and in the liver; strongly expressed on macrophages in acute inflamed tissues (peridontitis, contact excema, urticaria, erythrodermia) where some endothelial and epidermal cells may also express this antigen; absent on normal resident mononuclear phagocytes in healthy tissues (skin, gut, thymus).
Formulation:	PBS, pH 7.2 State: Purified State: Liquid purifed IgG fraction Stabilizer: None Preservative: 0.09% Sodium Azide
Concentration:	lot specific
Purification:	Affinity Chromatography on Protein G
Conjugation:	Unconjugated
Storage:	Store undiluted at 2-8°C. **DO NOT FREEZE!**
Stability:	Shelf life: one year from despatch.
Background:	The antigen is produced by the heterocomplex formation of MRP8 (S100A8 or Calgranulin A) and MRP14 (S100A9 or Calgranulin B), two calcium binding proteins of the S 100 protein family.
Synonyms:	Calgranulin A/B, Calprotectin, L1 Protein, CFAG, P8, P14, CAGA, CAGB, CFAG, MRP-8, MRP-14

Note: This antibody has been produced*in vitro* free of serum and is free of Bovine IgG

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

Product images:



Human Tonsil Frozen Section stained with S100A8/9 Antibody Cat.-No [BM4025] (Clone 27E10).