

Product datasheet for BM4028

OriGene Technologies, Inc.

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MRP8 (S100A8) Mouse Monoclonal Antibody [Clone ID: 8-5C2]

Product data:

Product Type: Primary Antibodies

Clone Name: 8-5C2

Applications: ELISA, IHC, WB

Recommended Dilution: ELISA.

Immunohistochemistry on Frozen Sections: 1 µg/ml (1/200).

Immunohistochemistry on Paraffin Sections: 4 μg/ml (1/20-1/50) (No pretreatment for

antigen retrieval necessary).

Microwave treatment in 0.01M Citrate, pH 6.0, may enhance the reactivity.

Suggested Positive Control: Human tonsil.

Has been described to work in **Dot Blots** and **not** in FACS.

Reactivity: Human
Host: Mouse
Isotype: IgG1

Clonality: Monoclonal

Immunogen: Cultured Human monocytes.

Specificity: This Monoclonal 8-5C2 antibody reacts with Human MRP8 in stimulated monocytes and

macrophages in late phase or chronic inflammation.

The antigen is MRP8, the epitope is suspected in the central portion of the peptide. **Antigen Distribution on Isolated Cells:** The antigen is found in granulocytes and

monocytes but not in other blood cells. In cultured monocytes, maximum MRP8 is expressed

after 3-4 days. Myeloid leukaemia stain positive.

Antigen Distribution on Tissue Sections: MRP8 is found in a distinct subpopulation of inflammatory perivascular infiltrates of the myelo-monocytic lineage. Macrophages synthesise MRP8 increasingly during the late stages of inflammation. A low MRP8 (and high MRP- 14) expression by macrophages was also reported in granulomatous diseases such as tuberculosis and sarcoidis. In non-granulomatous chronic inflammatory diseases such as chronic rheumatoid arthritis or chronic rejection after allograft transplantation, MRP8 and

MRP14 positive cells consist of different subpopulations.





MRP8 (S100A8) Mouse Monoclonal Antibody [Clone ID: 8-5C2] - BM4028

Formulation: Stock Solution contains PBS, pH 7.2

State: Purified

State: Lyophilized purified Ig fraction

Stabilizer: 0.05% Kathon Preservative: 5 mg/ml BSA

Reconstitution Method: Restore with 0.5 ml distilled water.

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 A8

Database Link: Entrez Gene 6279 Human

P05109

Background: Monoclonal antibody 8-5C2 identifies MRP8 (also named S100A8 or Calgranulin A), the Ca2+-

binding light subunit of the inflammatory L-1 protein complex. MRP8 forms Ca2+ dependent dimers or complexes with MRP14 (S100A9, Calgranulin B). It also forms disulfide-linked homodimers under the influence of hypochlorite, a process thought to abrogate the chemotactic property of MRP8. The antibody is useful in various immunological techniques.

Histological and serological data indicate that MRP8 is associated with chronic stages of

inflammatory diseases.

Synonyms: S100-A8, CAGA, MRP-8, CFAG



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

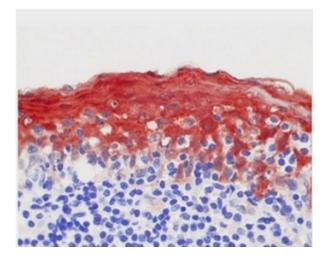
Protocol with formalin-fixed, paraffin-embedded sections:

(The whole procedure is performed at room temperature)

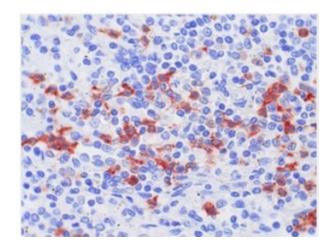
- 1. Deparaffinize and rehydrate tissue section
- 2. Place slide in a cuvette with 250ml 0.01M citrate buffer, pH 6.0
- 3. Heat slide in a microwave oven for 2 x 7min. at 700Watt
- 4. Leave slide in the buffer for 20min for cooling
- 5. Wash in distilled water
- 6. Block endogenous peroxidase
- 7. Wash in PBS
- 8. Block with 10% normal goat serum in PBS for 30min. in a humid chamber
- 9. Incubate with primary antibody (dilution see datasheet) for 1h in a humid chamber
- 10. Wash in PBS
- 11. Incubate with secondary antibody (peroxidase-conjugated goat anti mouse IgG+IgM (H+L) minimal-cross reaction to human) for 1h in a humid chamber
- 12. Wash in PBS
- 13. Incubate with AEC substrate (3-amino-9-ethylcarbazol) for 12min.
- 14. Wash in PBS
- 15. Counterstain with Mayer's hemalum



Product images:

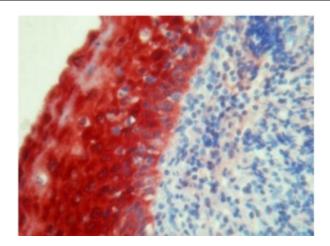


Immunohistochemistry on Human Tonsil Paraffin Sections using S100A8 antibody clone 8-5C2.



Immunohistochemistry on Human Spleen Paraffin Sections using S100A8 antibody clone 8-5C2.





Immunohistochemistry on Human Tonsil Paraffin Sections using S100A8 antibody clone 8-5C2.