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SM1097PS Monoclonal Antibody to CD35 / C3BR - Purified

Alternate names: C3b/C4b receptor, CR1, Complement receptor type 1

Quantity: 0.1 mg
Concentration: 1.0 mg/ml

Background: CD35 is a membrane glycoprotein found on peripheral blood cells, glomerular

podocytes, and follicular dendritic cells. The protein is a receptor for complement components C3b and C4b and regulates the activity of the complement cascade. Variation in this protein is the basis of the Knops blood group system. The two most common alleles, F and S, differ by 8 exons and are thought to be the result of an unequal crossover event. A secreted form of the protein present in plasma has been

described, but its full length nature has not been determined.

 Uniprot ID:
 P17927

 NCBI:
 9606

 GeneID:
 1378

Host / Isotype: Mouse / IgG1

Recommended Isotype

Controls:

SM10P (for use in human samples), AM03095PU-N

Clone: E11

Immunogen: Human acute monocytic leukaemia cells.

Spleen cells from immunised BALB/c mice were fused with cells of the mouse NS1

myeloma cell line.

Format: State: Liquid purified IgG fraction from Tissue Culture Supernatant

Purification: Affinity Chromatography on Protein A

Buffer System: PBS, pH 7.4

Preservatives: 0.09% Sodium Azide

Applications: Western Blot (See Birmingham, D.J. et al. 1996 for more details).

Flow Cytometry: Use 10 μ l of 1/50-1/200 diluted antibody to label 10⁶ cells or 100 μ l

whole blood.

Immunohistochemistry on Frozen Sections: 1-10 μ g/ml. Immunohistochemistry on Paraffin Sections: 1-10 μ g/ml.

Staining of formalin-fixed tissues requires boiling tissue sections in 10mM citrate

buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 minutes

Recommended Positive Control: Human Tonsil tissue.

Other applications not tested. Optimal dilutions are dependent on conditions and

should be determined by the user.

Specificity:

This antibody recognizes CD35, a single chain cell surface glycoprotein which exists in four allotypic forms (A,B,C,D) of 190kD, 220kD, 160kD and 250kD respectively.

The molecule is expressed by granulocytes, monocytes, B cells and some T cells.

Functionally CD35 acts as a receptor for the C3b component of complement.

Species: Human, Cynomolgus Monkey, Baboon, Rhesus Monkey.

Other species not tested.

Storage:

Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.

Shelf life: one year from despatch.

General Readings:

- 1. Hogg N, Ross GD, Jones DB, Slusarenko M, Walport MJ, Lachmann PJ. Identification of an anti-monocyte monoclonal antibody that is specific for membrane complement receptor type one (CR1). Eur J Immunol. 1984 Mar;14(3):236-43. PubMed PMID: 6368248.
- 2. Yoshino N, Ami Y, Terao K, Tashiro F, Honda M. Upgrading of flow cytometric analysis for absolute counts, cytokines and other antigenic molecules of cynomolgus monkeys (Macaca fascicularis) by using anti-human cross-reactive antibodies. Exp Anim. 2000 Apr;49(2):97-110. PubMed PMID: 10889948.
- 3. Birmingham DJ, Logar CM, Shen XP, Chen W. The baboon erythrocyte complement receptor is a glycophosphatidylinositol-linked protein encoded by a homologue of the human CR1-like genetic element. J Immunol. 1996 Sep 15;157(6):2586-92. PubMed PMID: 8805661.
- 4. Sopper S, Stahl-Hennig C, Demuth M, Johnston IC, Dörries R, ter Meulen V. Lymphocyte subsets and expression of differentiation markers in blood and lymphoid organs of rhesus monkeys. Cytometry. 1997 Dec 1;29(4):351-62. PubMed PMID: 9415418.

Pictures:

Staining of Human peripheral blood monocytes with Mouse anti Human CD35 Antibody Cat.-No SM1097PS (Clone E11).

