

CD46 (Membrane Cofactor Protein) Antibody - With BSA and Azide

Mouse Monoclonal Antibody [Clone 169-1-E4.3]

Catalog # AH11798

Product Information

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| Application | IF, FC |
| Primary Accession | P15529 |
| Other Accession | 4179 , 510402 |
| Reactivity | Human, Baboon |
| Host | Mouse |
| Clonality | Monoclonal |
| Isotype | Mouse / IgG2a, kappa |
| Clone Names | 169-1-E4.3 |
| Calculated MW | 43747 |

Additional Information

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|-------------------------|--|
| Gene ID | 4179 |
| Other Names | Membrane cofactor protein, TLX, Trophoblast leukocyte common antigen, CD46, CD46, MCP, MIC10 |
| Application Note | IF~~1:50~200 FC~~1:10~50 |
| Storage | Store at 2 to 8°C.Antibody is stable for 24 months. |
| Precautions | CD46 (Membrane Cofactor Protein) Antibody - With BSA and Azide is for research use only and not for use in diagnostic or therapeutic procedures. |

Protein Information

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|--------------------------|---|
| Name | CD46 |
| Synonyms | MCP, MIC10 |
| Function | Acts as a cofactor for complement factor I, a serine protease which protects autologous cells against complement-mediated injury by cleaving C3b and C4b deposited on host tissue. May be involved in the fusion of the spermatozoa with the oocyte during fertilization. Also acts as a costimulatory factor for T-cells which induces the differentiation of CD4+ into T-regulatory 1 cells. T-regulatory 1 cells suppress immune responses by secreting interleukin-10, and therefore are thought to prevent autoimmunity. |
| Cellular Location | Cytoplasmic vesicle, secretory vesicle, acrosome inner membrane; Single-pass type I membrane protein. Note=Inner acrosomal membrane of spermatozoa. |

Internalized upon binding of Measles virus, Herpesvirus 6 or Neisseria gonorrhoeae, which results in an increased susceptibility of infected cells to complement-mediated injury. In cancer cells or cells infected by Neisseria, shedding leads to a soluble peptide

Tissue Location

Expressed by all cells except erythrocytes.

Background

Recognizes a protein of 52kDa-58kDa, identified as CD46 (also known as membrane cofactor protein, MCP). Its epitope is located on the four immunogenic short consensus repeat (SCR) domains at N-terminus of the protein. CD46 exists as many isoforms in a variety of tissues. It is strongly expressed on salivary gland ducts and kidney ducts, moderately on lymphocytes and endothelium, and weakly on interstitial tissues and muscle cells, but not on erythrocytes. CD46 functions as a C3b/C4b-binding glycoprotein that inhibits complement activation on host cells. It also serves as a measles virus receptor, an adherence factor for group A Streptococcus pyogenes, and a cellular pilus receptor for pathogenic Neisseria.

References

Sparrow et al. Human Immunol 7, 115 (1983). | Purcell et al. Immunol Cell Biol 67, 279289 (1989). | Cho et al. Clin Exp Immunol 83, 257261 (1991). | Purcell et al. Immunol 70, 155161 (1990)

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.