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Datasheet

CD59 monoclonal antibody, clone MEM-43 (PE)

Catalog Number: MAB5011

Regulatory Status: For research use only (RUO)

Product Description: Mouse monoclonal antibody raised against native CD59.

Clone Name: MEM-43

Immunogen: Native purified CD59 from thymocytes and T lymphocytes.

Host: Mouse

Theoretical MW (kDa): 18-20

Reactivity: Human

Applications: Flow Cyt
(See our web site product page for detailed applications information)

Protocols: See our web site at http://www.abnova.com/support/protocols.asp or product page for detailed protocols

Specificity: This antibody reacts with well defined epitope (W40, R-53) on CD59 (Protectin), an 18-20 KDa glycosylphosphatidylinositol (GPI)-anchored glycoprotein expressed on all hematopoietic cells; it is widely present on cells in all tissues.

Form: Liquid

Conjugation: PE

Isotype: IgG2a

Recommend Usage: Flow Cytometry (20 ul in human blood cells 100 ul in whole blood or 10^6 cells in a suspension)
The optimal working dilution should be determined by the end user.

Storage Buffer: In PBS (0.2% BSA, 0.09% sodium azide)

Storage Instruction: Store in the dark at 4°C. Do not freeze.
Avoid prolonged exposure to light.
Aliquot to avoid repeated freezing and thawing.

Entrez GeneID: 966

Gene Symbol: CD59

Gene Alias: 16.3A5, 1F5, EJ16, EJ30, EL32, FLJ38134, FLJ92039, G344, HRF-20, HRF20, MAC-IP, MACIF, MEM43, MGC2354, MIC11, MIN1, MIN2, MIN3, MIRL, MSK21, p18-20

Gene Summary: This gene encodes a cell surface glycoprotein that regulates complement-mediated cell lysis, and it is involved in lymphocyte signal transduction. This protein is a potent inhibitor of the complement membrane attack complex, whereby it binds complement C8 and/or C9 during the assembly of this complex, thereby inhibiting the incorporation of multiple copies of C9 into the complex, which is necessary for osmolytic pore formation. This protein also plays a role in signal transduction pathways in the activation of T cells. Mutations in this gene cause CD59 deficiency, a disease resulting in hemolytic anemia and thrombosis, and which causes cerebral infarction. Multiple alternatively spliced transcript variants, which encode the same protein, have been identified for this gene. [provided by RefSeq]

References:

1. Expression of glycosylphosphatidylinositol-anchored CD59 on target cells enhances human NK cell-mediated cytotoxicity. Omidvar N, Wang EC, Brennan P, Longhi MP, Smith RA, Morgan BP. J Immunol. 2006 Mar 1;176(5):2915-23.
2. Incorporation of leucocyte GPI-anchored proteins and protein tyrosine kinases into lipid-rich membrane domains of COS-7 cells. Cebecauer M, Cerny J, Horejsi V. Biochem Biophys Res Commun. 1998 Feb 24;243(3):706-10.
3. Mutational analysis of the active site and antibody epitopes of the complement-inhibitory glycoprotein, CD59. Bodian DL, Davis SJ, Morgan BP, Rushmere NK. J Exp Med. 1997 Feb 3;185(3):507-16.