

CD59 monoclonal antibody, clone MEM-43 (Biotin)

Catalog # MAB5009 Size 100 ug

Specification						
Product Description	Mouse monoclonal antibody raised against native CD59.					
Immunogen	Native purified CD59 from thymocytes and T lymphocytes.					
Host	Mouse					
Theoretical MW (kDa)	18-20					
Reactivity	Human					
Specificity	This antibody reacts with well defined epitope (W40, R-53) on CD59 (Protectin), an 18-20 KDa glyco sylphosphatidylinositol (GPI)-anchored glycoprotein expressed on all hematopoietic cells; it is widely present on cells in all tissues.					
Form	Liquid					
Conjugation	Biotin					
Isotype	lgG2a					
Recommend Usage	Flow Cytometry (1:40) The optimal working dilution should be determined by the end user.					
Storage Buffer	In PBS, pH 7.4 (0.09% sodium azide)					
Storage Instruction	Store at 4°C. Do not freeze. Aliquot to avoid repeated freezing and thawing.					
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which shoul d be handled by trained staff only.					

Applications

Flow Cytometry



Gene Info — CD59					
Entrez GenelD	966 CD59				
Gene Name					
Gene Alias	16.3A5, 1F5, EJ16, EJ30, EL32, FLJ38134, FLJ92039, G344, HRF-20, HRF20, MAC-IP, MACI F, MEM43, MGC2354, MIC11, MIN1, MIN2, MIN3, MIRL, MSK21, p18-20				
Gene Description	CD59 molecule, complement regulatory protein				
Omim ID	107271				
Gene Ontology	<u>Hyperlink</u>				
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				
Other Designations	20 kDa homologous restriction factor CD59 antigen CD59 antigen p18-20 (antigen identified by monoclonal antibodies 16.3A5, EJ16, EJ30, EL32 and G344) CD59 glycoprotein Ly-6-like protein T cell-activating protein human leukocyte antigen MIC11 lymphocytic a				

Publication Reference

 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.

Journal of Immunology 2006 Mar; 176(5):2915.

Application: Flow Cyt, Human, K-562 cells

 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.

Biochemical and Biophysical Research Communications 1998 Feb; 243(3):706.

Application: Flow Cyt, Monkey, COS-7 cells





	•	Mutational analy	ysis of the	active site and	antibody	epitopes	of the com	plement-inhibitory	glycoprotein,	CD59
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Bodian DL, Davis SJ, Morgan BP, Rushmere NK.

The Journal of Experimental Medicine 1997 Feb; 185(3):507.

Pathway

- Complement and coagulation cascades
- Hematopoietic cell lineage

Disease

- Genetic Predisposition to Disease
- Lymphoma
- Macular Degeneration