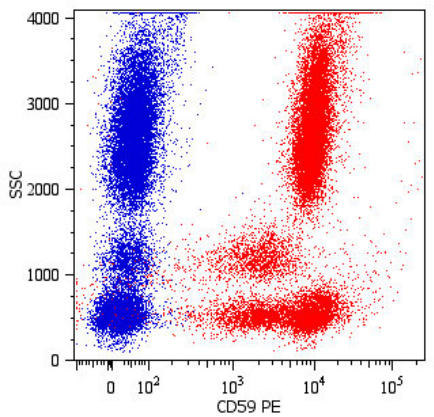
CD59 monoclonal antibody, clone MEM-43 (PE)

Catalog # MAB5011 Size 100 Reactions

Applications



Flow Cytometry

Surface staining of human peripheral blood cells with CD59 monoclonal antibody, clone MEM-43 (PE) (Cat # MAB5011).

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	PE
Isotype	IgG2a

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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.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which shoul d be handled by trained staff only.

Applications

- Flow Cytometry

  Surface staining of human peripheral blood cells with CD59 monoclonal antibody, clone MEM-43 (PE) (Cat # MAB5011).

Gene Info — CD59

Entrez GeneID	966
Gene Name	CD59
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	Hyperlink
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 thi s 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 pathw ays 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 s pliced transcript variants, which encode the same protein, have been identified for this gene. [prov ided 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 protei n|T cell-activating protein|human leukocyte antigen MIC11|lymphocytic a

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Publication Reference

- High-Sensitivity Detection of PNH Red Blood Cells, Red Cell Precursors, and White Blood Cells.

  D Robert Sutherland, Andrea Illingworth, Michael Keeney, Stephen J Richards

  Curr Protoc Cytom 2015 Apr; 72:6.37.1-6.3.

- 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 analysis of the active site and antibody epitopes of the complement-inhibitory glycoprotein, CD59.

  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

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