

## Datasheet

### CD59 monoclonal antibody, clone MEM-43 (FITC)

**Catalog Number:** MAB5010

**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:** FITC

**Isotype:** IgG2a

**Recommend Usage:** Flow Cytometry (20 ul in human blood cells 100 ul in whole blood or 10<sup>6</sup> 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.