

**SM1145R****Monoclonal Antibody to CD59 - PE****Alternate names:**

20 kDa homologous restriction factor, HRF-20, HRF20, MAC-IP, MAC-inhibitory protein, MACIF, MEM43 antigen, MIC11, MIN1, MIN2, MIN3, MIRL, MSK21, Membrane attack complex inhibition factor, Membrane inhibitor of reactive lysis, Protectin

**Quantity:**

100 Tests

**Background:**

CD59 is an LY6 like protein expressed in human lymphoid cells (haemopoietic and non- haemopoietic cells), regulates the action of the complement membrane attack complex on homologous cells. It is a potent inhibitor of the complement membrane attack complex action. It acts by binding to the C8 and/or C9 complements of the membrane attack complex, thereby preventing incorporation of the multiple copies of C9 required for complete formation of the osmolytic pore. This inhibitor appears to be species-specific. CD59 is also involved in signal transduction for T-cell activation complexed to a protein tyrosine kinase

**Uniprot ID:**

[P13987](#)

**NCBI:**

[NP\\_000602.1](#)

**GeneID:**

[966](#)

**Host / Isotype:**

Mouse / IgG2a

**Clone:**

MEM-43

**Format:**

**State:** Lyophilized purified IgG fraction.

**Purification:** Affinity chromatography on Protein A.

**Buffer System:** BS, pH 7.4 containing 0.09% Sodium Azide as preservative and 1% BSA as stabilizer.

**Label:** PE – R. Phycoerythrin (RPE)

**Reconstitution:** Restore with distilled water.

**Applications:**

Flow Cytometry.

Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

**Specificity:**

This antibody reacts with a PI-linked glycoprotein, Mw 18-20kD found on all types of leucocytes including platelets. MEM-43 has been shown to stimulate NK activity.

**Species:** Human.

Other species not tested.

**Storage:**

Prior to and following reconstitution store the antibody undiluted at 2-8°C.

**DO NOT FREEZE!**

This product is photosensitive and should be protected from light.

Shelf life: one year from despatch.

**General Readings:**

1. Stefanova, I. et al. (1989) in Leucocyte Typing IV: White cell differentiation antigens. Ed. Knapp, W. et al. Oxford University Press pp 678-697.

2. Stefanova, I. et al. (1989) Characterisation of a broadly expressed human leucocyte antigen MEM-43 anchored in membrane through phosphatidylinositol. Mol. Immunol. 26: 153 - 161.

3. Tandon N, Yan SL, Morgan BP, Weetman AP. Expression and function of multiple regulators of complement activation in autoimmune thyroid disease. *Immunology*. 1994 Apr;81(4):643-7. PubMed PMID: 7518800.
4. Horejsí V, Angelisová P, Bazil V, Kristofová H, Stoyanov S, Stefanová I, et al. Monoclonal antibodies against human leucocyte antigens. II. Antibodies against CD45 (T200), CD3 (T3), CD43, CD10 (CALLA), transferrin receptor (T9), a novel broadly expressed 18-kDa antigen (MEM-43) and a novel antigen of restricted expression (MEM-74). *Folia Biol (Praha)*. 1988;34(1):23-34. PubMed PMID: 2968928.
5. Hadam, M. R. (1989) In *Leucocyte Typing IV white cells differentiation antigens*. Ed. Knapp, W. et al. Oxford University Press. pp 720 - 722.
6. Stefanová I, Horejsí V. Association of the CD59 and CD55 cell surface glycoproteins with other membrane molecules. *J Immunol*. 1991 Sep 1;147(5):1587-92. PubMed PMID: 1715364.

**Pictures:**

Staining of human peripheral blood lymphocytes with Mouse Anti Human CD59-RPE (SM1145R/RT).

