



1P-388-T025

Monoclonal Antibody to CD59 Phycoerythrin (PE) conjugated (25 tests)

Clone:	MEM-129
Isotype:	Mouse IgM
Specificity:	The antibody MEM-129 reacts with CD59 (Protectin), a 18-20 kDa glycosylphosphatidylinositol (GPI)-anchored glycoprotein expressed on all hematopoietic cells; it is widely present on cells in all tissues.
Immunogen:	Human peripheral blood lymphocytes
Species Reactivity:	Human, Porcine
Preparation:	The purified antibody is conjugated with R-Phycoerythrin (PE) under optimum conditions. The conjugate is purified by size-exclusion chromatography and adjusted for direct use. No reconstitution is necessary.
Storage Buffer:	The reagent is provided in phosphate buffered saline (PBS) containing 15 mM sodium azide and 0.2% (w/v) high-grade protease free Bovine Serum Albumin (BSA) as a stabilizing agent.
Storage / Stability:	Store in the dark at 2-8°C. Do not freeze. Avoid prolonged exposure to light. Do not use after expiration date stamped on vial label. Short-term exposure to room temperature should not affect the quality of the reagent. However, if reagent is stored under any conditions other than those specified, the conditions must be verified by the user.
Usage:	The reagent is designed for Flow Cytometry analysis of human blood cells using 20 µl reagent / 100 µl of whole blood or 10 ⁶ cells in a suspension. The content of a vial (0.5 ml) is sufficient for 25 tests.
Expiration:	See vial label
Lot Number:	See vial label
Background:	CD59 (Protectin) is a small (18-20 kDa) GPI-anchored ubiquitously expressed inhibitor of the membrane attack complex (MAC). It is thus the key regulator that preserves the autologous cells from terminal effector mechanism of the complement cascade. CD59 associates with C5b-8 complex and thereby counteracts appropriate formation of cytolytic pore within the plasma membrane. CD59 is also an low-affinity ligand of human CD2 and causes T cell costimulation.

For laboratory research only, not for drug, diagnostic or other use.

**Antibodies****References:**

- *Meri S, Morgan BP, Davies A, Daniels RH, Olavesen MG, Waldmann H, Lachmann PJ: Human protectin (CD59), an 18,000-20,000 MW complement lysis restricting factor, inhibits C5b-8 catalysed insertion of C9 into lipid bilayers. *Immunology*. 1990 Sep;71(1):1-9.
- *Rooney IA, Davies A, Griffiths D, Williams JD, Davies M, Meri S, Lachmann PJ, Morgan BP: The complement-inhibiting protein, protectin (CD59 antigen), is present and functionally active on glomerular epithelial cells. *Clin Exp Immunol*. 1991 Feb;83(2):251-6.
- *Menu E, Tsai BC, Bothwell AL, Sims PJ, Bierer BE: CD59 costimulation of T cell activation. CD58 dependence and requirement for glycosylation. *J Immunol*. 1994 Sep 15;153(6):2444-56.
- *Baalasubramanian S, Harris CL, Donev RM, Mizuno M, Omidvar N, Song WC, Morgan BP: CD59a is the primary regulator of membrane attack complex assembly in the mouse. *J Immunol*. 2004 Sep 15;173(6):3684-92.
- *Stulnig TM, Berger M, Sigmund T, Stockinger H, Horejsí V, Waldhäusl W: Signal transduction via glycosyl phosphatidylinositol-anchored proteins in T cells is inhibited by lowering cellular cholesterol. *J Biol Chem*. 1997 Aug 1;272(31):19242-7.
- *Olweus J, Lund-Johansen F, Terstappen LW: CD64/Fc gamma RI is a granulo-monocytic lineage marker on CD34+ hematopoietic progenitor cells. *Blood*. 1995 May 1;85(9):2402-13.

For laboratory research only, not for drug, diagnostic or other use.