EXBIO Antibodies

PRODUCT DATA SHEET

1P-233-T025

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

**Clone:** MEM-43

**Isotype:** Mouse IgG2a

**Specificity:** The antibody MEM-43 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.
HLDA IV; WS Code NL 705
HLDA V; WS Code AS S013
HLDA V; WS Code BP BP345
HLDA V; WS Code T T-103

**Immunogen:** Thymocytes and T lymphocytes

**Species Reactivity:** Human

**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.**

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**References:**

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IMPORTANT ARTICLE *Robert Sutherland D, Keeney M, Illingworth A: Practical guidelines for the high-sensitivity detection and monitoring of paroxysmal nocturnal hemoglobinuria (PNH) clones by flow cytometry. Cytometry B Clin Cytom. 2012 Apr 12. doi: 10.1002/cyto.b.21023. [Epub ahead of print] Note: This article recommends PE-conjugated MEM-43 as a good reagent for red blood cell analysis of PNH (Paroxysmal Nocturnal Hemoglobinuria) by flow cytometry.
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*And many other.

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