

PB-233-T100

## Monoclonal Antibody to CD59 Pacific Blue™ conjugated (100 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. This

antibody does not compete with MEM-43/5.

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

Regulatory Status: RUO

Immunogen: Thymocytes and T lymphocytes

Species Reactivity: Human

**Preparation:** The purified antibody is conjugated with Pacific Blue™ 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 stabilizing phosphate buffered saline (PBS) solution

containing 15mM sodium azide.

**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.

**Usage:** The reagent is designed for Flow Cytometry analysis of human blood cells using 4

μl reagent / 100 μl of whole blood or 10<sup>6</sup> cells in a suspension.

The content of a vial (0.4 ml) is sufficient for 100 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.





## References:

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- \*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.
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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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