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## Mouse Anti-CD59 Monoclonal Antibody

CLX63AP  
CLX63B  
CLX63F  
CLX63PE  
CLX63APC

**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

**Species Reactivity:** Human

**Application:** Flow Cytometry; Immunohistochemistry (paraffin sections), Immunoprecipitation.

**Conjugate Preparation:**

The purified antibody is conjugated with Biotin-LC-NHS, Fluorescein isothiocyanate (FITC), R-Phycoerythrin (PE) or cross-linked Allophycocyanin (APC) under optimum conditions. The conjugate is purified by size-exclusion chromatography and adjusted for direct use. No reconstitution is necessary.

**Presentation:**

**Purified:** 0.1 mg (1 mg/mL) purified IgG buffered in PBS with 15 mM sodium azide, approx. pH 7.4. (Purified from hybridoma culture supernatant by protein-A affinity chromatography).

**Biotin:** 0.1 mg (1 mg/mL) of Biotin conjugated IgG buffered in in stabilizing phosphate buffered saline (PBS) solution containing 15mM sodium azide.

**FITC:** 2 mL of FITC conjugated IgG buffered in in stabilizing phosphate buffered saline (PBS) solution containing 15mM sodium azide. Sufficient for 100 tests.

**PE:** 2 mL of PE conjugated IgG buffered in in stabilizing phosphate buffered saline (PBS) solution containing 15mM sodium azide. Sufficient for 100 tests.

**APC:** 1 mL of APC conjugated IgG buffered in in stabilizing phosphate buffered saline (PBS) solution containing 15mM sodium azide. Sufficient for 100 tests.

*Continued Overleaf.....*

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### **Storage / Stability:**

Store in the dark at 2-8°C. Do not freeze all formats. Avoid prolonged exposure to light of conjugates. Do not use after expiration date stamped on vial label.

### **Usage:**

Recommended dilutions for Flow Cytometry analysis of human blood cells using:

**Purified:** 1-2 µg/ml

**Biotin:** 5 µg/ml

**FITC:** 20 µl reagent / 100 µl of whole blood or 10<sup>6</sup> cells in a suspension.

**PE:** 20 µl reagent / 100 µl of whole blood or 10<sup>6</sup> cells in a suspension.

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

Recommended dilutions for Immunohistochemistry (paraffin sections) using:

**Purified:** 10 µg/ml

### **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 a low-affinity ligand of human CD2 and causes T cell co-stimulation.

### **References:**

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\*Baalasubramanian S, et al: CD59a is the primary regulator of membrane attack complex assembly in the mouse. *J Immunol*. 2004 Sep 15;173(6):3684-92.

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**Laboratory Reagent For Research Use Only**