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### Mouse Anti-CD8 Monoclonal Antibody

CLX10AP  
CLX10B  
CLX10F

CLX10PE  
CLX10PCP  
CLX10APC

**Clone:** MEM-31

**Isotype:** Mouse IgG2a

**Specificity:**

The antibody MEM-31 recognizes a conformationally-dependent epitope of CD8, a cell surface glycoprotein found on most cytotoxic T lymphocytes that mediates efficient cell-cell interactions within the immune system. CD8 is a disulfide-linked dimer and exists as a CD8 alpha/alpha homodimer or CD8 alpha/beta heterodimer (each monomer approx. 32-34 kDa). The antibody does not react with formaldehyde-fixed cells; negative in Western Blotting application. HLDA III; WS Code T 575

**Immunogen:** Crude thymus membrane fraction.

**Species Reactivity:** Human.

**Application:** Flow Cytometry, Immunoprecipitation and Mass Cytometry.

**Conjugate Preparation:**

The purified antibody is conjugated with Biotin-LC-NHS, Fluorescein isothiocyanate (FITC), R-Phycoerythrin (PE), Peridinin-chlorophyll-protein complex (PerCP) or cross-linked Allophycocyanin (APC) under optimum conditions. The conjugates are purified by size-exclusion chromatography and adjusted for direct use (FITC, PE, APC, PerCP). 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 by protein-A affinity chromatography; purity > 95% by SDS-PAGE).

**Biotin:** 0.1 mg (1 mg/mL) of Biotin conjugated IgG buffered in tris buffered saline (TBS) with 15 mM sodium azide, approx. pH 8.0.

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

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

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

**APC:** 1 mL of APC conjugated IgG buffered 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:

**Purified:** 1 µg/ml

**Biotin:** 1:2500 dilution

**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.

**PerCP:** 10 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.

**\*Optimal working concentrations should be determined by the investigator.**

**Background:**

The CD8 T cell coreceptor (monomer approx. 32-34 kDa) is expressed as alpha/beta heterodimer on majority of MHC I-restricted conventional T cells and thymocytes and as alpha/alpha homodimer on subsets of memory T cells, intraepithelial lymphocytes, NK cells and dendritic cells. Regulation of CD8 beta level on T cell surface seems to be an important mechanism to control their effector function. Assembly of CD8 alpha-beta but not alpha-alpha dimers is connected with formation or localization to the lipid rafts. Recruiting triggered TCR complexes to these membrane microdomains as well as affinity of TCR to MHC I is modulated by CD8, thereby affecting the functional diversity of the TCR signaling.

**References:**

\*Devine L, Thakral D, Nag S, Dobbins J, Hodsdon ME, Kavathas PB: Mapping the binding site on CD8 beta for MHC class I reveals mutants with enhanced binding. *J Immunol.* 2006 Sep 15;177(6):3930-8.

\*Pang DJ, Hayday AC, Bijlmakers MJ.: CD8 Raft localization is induced by its assembly into CD8alpha beta heterodimers, Not CD8alpha alpha homodimers. *J Biol Chem.* 2007 May 4;282(18):13884-94.

\*van den Berg HA, Wooldridge L, Laugel B, Sewell AK: Coreceptor CD8-driven modulation of T cell antigen receptor specificity. *J Theor Biol.* 2007 Nov 21;249(2):395-408.

\*Horejsi V et al.: Monoclonal antibodies against human leucocyte antigens. I. Antibodies against beta-2-microglobulin, immunoglobulin kappa light chains, HLA-DR-like antigens, T8 antigen, T1 antigen, a monocyte antigen, and a pan-leucocyte antigen. *Folia Biol. (Praha)* 32, 12 (1986).

\*Leukocyte Typing III., McMichael A. J. et al (Eds.), Oxford University Press (1987).

\*Horejsi V, Angelisová P, Bazil V, Kristofová H, Stoyanov S, Stefanová I, Hausner P, Vosecký M, Hilgert I: 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.

\*Brdicková N, Brdicka T, Angelisová P, Horváth O, Spicka J, Hilgert I, Paces J, Simeoni L, Kliche S, Merten C, Schraven B, Horejsi V: LIME: a new membrane Raft-associated adaptor protein involved in CD4 and CD8 coreceptor signaling. *J Exp Med.* 2003 Nov 17;198(10):1453-62.

\*Drbal K, Moertelmaier M, Holzhauser C, Muhammad A, Fuertbauer E, Howorka S, Hinterberger M, Stockinger H, Schütz GJ: Single-molecule microscopy reveals heterogeneous dynamics of lipid raft components upon TCR engagement. *Int Immunol.* 2007 May;19(5):675-84.

\*Estefanía E, Flores R, Gómez-Lozano N, Aguilar H, López-Botet M, Vilches C: Human KIR2DL5 is an inhibitory receptor expressed on the surface of NK and T lymphocyte subsets. *J Immunol.* 2007 Apr 1;178(7):4402-10.

\*Linnebacher M, Wienck A, Boeck I, Klar E: Identification of an MSI-H tumor-specific cytotoxic T cell epitope generated by the (-1) frame of U79260(FTO). *J Biomed Biotechnol.* 2010;2010:841451.

\*Kanderova V, Kuzilkova D, Stuchly J, Vaskova M, Brdicka T, Fiser K, Hrusak O, Lund-Johansen F, Kalina T: High-resolution Antibody Array Analysis of Childhood Acute Leukemia Cells. *Mol Cell Proteomics.* 2016 Apr;15(4):1246-61.

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