

## Monoclonal Antibody to CD8 - Purified

<b>Alternate names:</b>	CD8, MAL, T-cell surface glycoprotein CD8 alpha chain, T-cell surface glycoprotein CD8 beta chain, T-lymphocyte differentiation antigen T8/Leu-2
<b>Catalog No.:</b>	SM3038PX
<b>Quantity:</b>	1 mg
<b>Concentration:</b>	1.0 mg/ml
<b>Background:</b>	<p>The CD8 T cell coreceptor (monomer approx. 32-34 kDa) is expressed as ab heterodimer on majority of MHC I-restricted conventional T cells and thymocytes and as aa homodimer on subsets of memory T cells, intraepithelial lymphocytes, NK cells and dendritic cells. Regulation of CD8b level on T cell surface seems to be an important mechanism to control their effector function. Assembly of CD8 a-b but not a-a 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.</p> <p>CD8 is a disulfide-linked dimer and exists as a CD8a homodimer or CD8a/b heterodimer (each monomer approx. 32-34 kDa).</p>
<b>Host / Isotype:</b>	Mouse / IgG1
<b>Recommended Isotype Controls:</b>	SM10P (for use in human samples), AM03095PU-N
<b>Clone:</b>	MEM-87
<b>Immunogen:</b>	Leucocytes of a patient suffering from LGL Type Leukaemia
<b>Format:</b>	<b>State:</b> Liquid Ig fraction <b>Purification:</b> Protein-A affinity chromatography; purity: > 95% (by SDS-PAGE) <b>Buffer System:</b> Phosphate buffered saline (PBS) with 15 mM sodium azide, approx. pH 7.4
<b>Applications:</b>	Immunoprecipitation (Excellent for immunoisolation of CD8 + T cells). Flow Cytometry: 2 µg/ml. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
<b>Specificity:</b>	The antibody recognizes CD8, a cell surface glycoprotein found on most cytotoxic T lymphocytes that mediates efficient cell-cell interactions within the immune system. <b>Species:</b> Human. Other species not tested.
<b>Storage:</b>	Store the antibody at 2 - 8 °C up to one month or (in aliquots) at -20 °C for longer. Avoid repeated freezing and thawing. Shelf life: one year from despatch.
<b>General Readings:</b>	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

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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.