

## Monoclonal Antibody to CD8 - FITC

<b>Alternate names:</b>	CD8 alpha chain, CD8A, MAL, T-cell surface glycoprotein CD8 alpha chain, T-lymphocyte differentiation antigen T8/Leu-2
<b>Catalog No.:</b>	AM08023FC-S
<b>Quantity:</b>	0.1 mg
<b>Concentration:</b>	0.5 mg/ml
<b>Background:</b>	In the mouse, CD8 exists in two forms: (i) a CD8 heterodimer composed of an alpha chain (CD8a/Lyt-2) and a beta chain (CD8b/Lyt-3); and (ii) a homodimer of two alpha chains. The heterodimer is found on the surface of essentially all thymocytes and the "suppressor/cytotoxic" subpopulation of mature T lymphocytes. Subsets of intestinal intraepithelial lymphocytes express CD8a without CD8b. It has been suggested that CD8 <sup>+</sup> b <sup>-</sup> T cells mature extrathymically, while development of the CD8 <sup>+</sup> a <sup>+</sup> b <sup>+</sup> population of T cells is thymus-dependent. CD8 acts as a coreceptor with MHC Class I-restricted T cell receptors in antigen recognition and positive selection of MHC class I-restricted CD8 <sup>+</sup> T cells.
<b>Uniprot ID:</b>	<a href="#">P01731</a>
<b>NCBI:</b>	<a href="#">NP_001074579.1</a>
<b>GeneID:</b>	<a href="#">12525</a>
<b>Host / Isotype:</b>	Rat / IgG2a
<b>Clone:</b>	53-6.7
<b>Format:</b>	<b>State:</b> Liquid purified Ig fraction <b>Buffer System:</b> PBS containing 0.09% Sodium Azide as preservative. <b>Label:</b> FITC – Fluorescein Isothiocyanate Isomer 1
<b>Applications:</b>	Flow Cytometry: < / = 2 µg/10e6 cells. (Ref.8,9) Immunohistochemistry (Acetone-Fixed Frozen Sections) (See Ref. 10) Immunoprecipitation. (Ref.8) Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
<b>Specificity:</b>	This antibody recognises the alpha chain of the Murine CD8 heterodimer (Mr. 32-34 kDa). In vivo and in vitro treatment with the 53-6.7 monoclonal antibody effectively depletes CD8 <sup>+</sup> cells. The 53-6.7 monoclonal antibody also blocks allogeneic help specific for class I MHC antigens and T cell responses to IL-2. (Ref. 1-8) <b>Species:</b> Mouse. Other species not tested.

**Storage:** Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. This product is photosensitive and should be protected from light. Avoid repeated freezing and thawing. Shelf life: one year from despatch.

- General Readings:**
1. Ledbetter, J. A. and W. E. Seaman. 1982. Immunol. Rev. 68:197.
  2. Lefrancois, L. 1991. J. Immunol. 147:1746.
  3. Lefrancois, L. 1991. Immunology Today 12:436.
  4. Takahasi, K., M. Nakata, T. Tanaka, H. Adachi, H. Nakauchi, H. Yagita, and K. Okumura. 1992. Proc. Natl. Acad. Sci. USA. 89:5557.
  5. Mage, M. G. 1991. In Current Protocols in Immunology. John Wiley & Sons, New York, p. 3.4.1.
  6. Kruisbeek, A. M. 1991. In Current Protocols in Immunology. John Wiley & Sons, New York, p. 4.1.1.
  7. Swain, S. L., D. P. Dialynas, F. W. Fitch, and M. English. 1984. J. Immunol. 132:1118.
  8. Ledbetter, J. A. and L. A. Herzenberg. 1979. Immunol. Rev. 47:63.
  9. Ledbetter, J. A., R. V. Rouse, H. S. Micklem, and L. A. Herzenberg. 1980. J. Exp. Med. 152:280.
  10. Jia, W. and J. F. Kearney. 1996. Personal communication.

**Pictures:** **Immunofluorescent Staining:** Cells from BALB/c mesenteric lymph nodes were double-stained with anti-mouse CD8a-FITC and anti Mouse CD4-R-PE (clone GK1.5), gated on small lymphocytes and analyzed on a FACScan (TM) flow cytometer (BDIS, San Jose, CA). Amount used: 1 µg/10e6 cells

