



CD8a Antibody [53-6.7] (PE-Cy5)

CATALOG NUMBER: 76-690

Specifications

SPECIES REACTIVITY:	Mouse
TESTED APPLICATIONS:	FACS
USER NOTE:	Optimal dilutions for each application to be determined by the researcher.
SPECIFICITY:	The 53-6.7 monoclonal antibody specifically reacts with Ly-2, the 38 kDa alpha chain, and with Lyt-2, the 34 kDa alpha' chain, of the mouse CD8 antigen.
HOST SPECIES:	Rat

Properties

PURIFICATION:	The monoclonal antibody was purified utilizing affinity chromatography and unreacted dye was removed from the product.
PHYSICAL STATE:	liquid
BUFFER:	Phosphate-buffered aqueous solution, ≤0.09% Sodium azide, may contain carrier protein/stabilizer, pH7.2.
CONCENTRATION:	0.2 mg/mL
STORAGE CONDITIONS:	The product should be stored undiluted at 4°C and should be protected from prolonged exposure to light. Do not freeze.
CLONALITY:	Monoclonal
ISOTYPE:	Rat IgG2a, kappa
CONJUGATE:	PE-Cy5

Additional Info

ALTERNATE NAMES:	Ly-2, Ly-B, Ly-35, Lyt-2, BB154331, Cd8a
OFFICIAL SYMBOL:	Cd8a
GENE ID:	12525

Background

BACKGROUND:	The 53-6.7 monoclonal antibody specifically reacts with Ly-2, the 38 kDa alpha chain, and with Lyt-2, the 34 kDa alpha' chain, of the mouse CD8 antigen. The alpha' chain is the truncated form of alpha chain, encoded by the same CD8a gene. In CD8a, the alpha and alpha' chains form heterodimers with CD8b (the beta chains) or homodimers (alpha-alpha), which occur as receptors on the surface of the majority of thymocytes. A subpopulation of mature T lymphocytes expresses the CD8 alpha beta (alpha beta TCR T cells), and a subpopulation of intestinal intraepithelial lymphocytes and dendritic cells express CD8a without CD8b. CD8 interacts with the mouse major histocompatibility complex class I (MHC class I) molecules on antigen-presenting cells or epithelial cells. Its function seems to be to attenuate the CD8-mediated signal for the stimulation of intrathymic T-cell maturation. The 53-6.7 antibody is useful for depleting CD8+ peripheral T lymphocytes. It cross reacts with the alpha- and alpha'-like polypeptides on some thymic and peripheral lymphocytes.
REFERENCES:	<p>1) Ledbetter, J. A., Herzenberg, L. A. (1979). Xenogeneic Monoclonal Antibodies to Mouse Lymphoid Differentiation Antigens*. Immunological reviews, 47(1), 63-90.</p> <p>2) Ledbetter, J. A., Rouse, R. V., Micklem, H. S., Herzenberg, L. A. (1980). T cell subsets defined by expression</p>

of Lyt-1, 2, 3 and Thy-1 antigens. Two-parameter immunofluorescence and cytotoxicity analysis with monoclonal antibodies modifies current views. *The Journal of experimental medicine*, 152(2), 280-295.

3) Hathcock, K. (1991). T cell enrichment by cytotoxic elimination of B cells and accessory cells. *Current protocols in immunology*, 3-3.

FOR RESEARCH USE ONLY

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