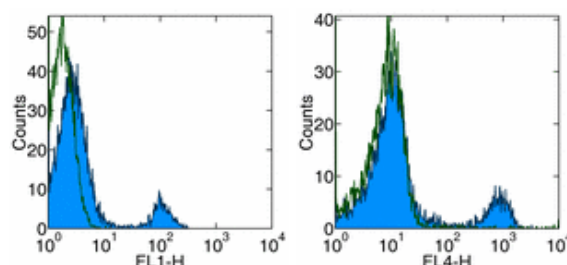


Product Information

Contents: Functional Grade Purified anti-mouse CD8a (Ly-2)
Catalog Number: 16-0081
Sizes: 50 ug, 100 ug, 500 ug, 1 mg
Formulation: Phosphate buffer pH 7.2,
150 mM NaCl, No NaN₃
Storage Conditions: Store at 4°C.
Avoid repeated freeze/thaw cycles.
KEEP CONTENT STERILE.
Endotoxin Level: Less than 0.001 ng/ug antibody, as determined
by the LAL assay.
Clone: 53-6.7
Isotype: Rat IgG2a, κ



Surface staining of mouse splenocytes with anti-mouse CD8a (53-6.7) FITC (left), and APC (right). Appropriate isotype controls were used (open histogram). Total viable cells were used for analysis.

Available Formats of This Product

Cat. No.	Format	Excite (nm)	Emit (nm)	Reported Applications
10-0081	APC-Cy7 Rat anti-mouse CD8 (alpha subunit; CD8a)	633	760	FC
11-0081	FITC Rat anti-mouse CD8 (alpha subunit; CD8a)	488	518	FC
12-0081	PE Rat anti-mouse CD8 (alpha subunit; CD8a)	488	575	FC
13-0081	Biotin Rat anti-mouse CD8 (alpha subunit; CD8a)	N/A	N/A	FC
14-0081	Affinity Purified Rat anti-mouse CD8 (alpha subunit; CD8a)	N/A	N/A	FA FC IH/F IP
15-0081	PE-Cy5 Rat anti-mouse CD8 (alpha subunit; CD8a)	488	670	FC
16-0081	Functional Grade* Purified Rat anti-mouse CD8 (alpha subunit; CD8a)	N/A	N/A	FA FC
17-0081	APC Rat anti-mouse CD8 (alpha subunit; CD8a)	633	660	FC
19-0081	Cy5 Rat anti-mouse CD8 (alpha subunit; CD8a)	633	670	FC
25-0081	PE-Cy7 Rat anti-mouse CD8 (alpha subunit; CD8a)	488	760	FC
30-0081	DISCONTINUED - Allophycocyanin-Cy5.5 (APC-Cy5.5) anti-mouse CD8a (Ly-2)	633	690	FC

*Functional Grade™ (FG™): Azide-free, sterile-filtered, and endotoxin < 0.001 ng/μg.
Purified: Contains azide, not sterile-filtered, and not endotoxin tested.

Description

The 53-6.7 monoclonal antibody reacts with the mouse CD8a molecule. CD8a is an approximately 32-34 kDa cell surface receptor expressed either as a heterodimer with the CD8 β chain (CD8 αβ) or as a homodimer (CD8 αα). A majority of thymocytes and a subpopulation of mature αβ TCR T cells express CD8 αβ while γδ TCR T cells, a subpopulation of intestinal intraepithelial lymphocytes (IELs) and dendritic cells express CD8 αα. CD8 binds to MHC class I and through its association with protein tyrosine kinase p56lck plays a role in T cell development and activation of mature T cells.

Usage

For research use only, not for diagnostic or therapeutic use. The 53-6.7 antibody has been reported for use in flow cytometric analysis. It has also been reported in T cell activation, isolation and depletion of CD8⁺ cells, and blocking of ligand binding.

Applications Tested

The 53-6.7 antibody has been tested by flow cytometric analysis of mouse thymocyte and splenocyte suspensions. This can be used at less than or equal to 0.25 μg per million cells in a 100 μl total staining volume. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

Related Products

Cat. 10-0081 APC-Cy7 Rat anti-mouse CD8 (alpha subunit; CD8a) (clone 53-6.7)
Cat. 11-0081 FITC Rat anti-mouse CD8 (alpha subunit; CD8a) (clone 53-6.7)
Cat. 12-0081 PE Rat anti-mouse CD8 (alpha subunit; CD8a) (clone 53-6.7)
Cat. 13-0081 Biotin Rat anti-mouse CD8 (alpha subunit; CD8a) (clone 53-6.7)
Cat. 14-0081 Affinity Purified Rat anti-mouse CD8 (alpha subunit; CD8a) (clone 53-6.7)
Cat. 15-0081 PE-Cy5 Rat anti-mouse CD8 (alpha subunit; CD8a) (clone 53-6.7)
Cat. 17-0081 APC Rat anti-mouse CD8 (alpha subunit; CD8a) (clone 53-6.7)
Cat. 19-0081 Cy5 Rat anti-mouse CD8 (alpha subunit; CD8a) (clone 53-6.7)
Cat. 25-0081 PE-Cy7 Rat anti-mouse CD8 (alpha subunit; CD8a) (clone 53-6.7)
Cat. 11-4317 Streptavidin-FITC (Fluorescein isothiocyanate)
Cat. 12-4317 Streptavidin-PE (Phycoerythrin)
Cat. 17-4317 Streptavidin Allophycocyanin (SA-APC)
Cat. 16-4321 Functional Grade Purified Rat IgG2a Isotype Control
Cat. 11-4811 FITC Anti-Rat IgG
Cat. 13-4813 Biotin Anti-Rat IgG (clone Polyclonal)

References

Ledbetter, J. A. and L. A. Herzenberg (1979). "Xenogeneic monoclonal antibodies to mouse lymphoid differentiation antigens." Immunol Rev 47: 63-90.

Ledbetter, J. A., R. V. Rouse, et al. (1980). "T cell subsets defined by expression of Lyt-1,2,3 and Thy-1 antigens. Two-parameter immunofluorescence and cytotoxicity analysis with monoclonal antibodies modifies current views." J Exp Med 152(2): 280-95.