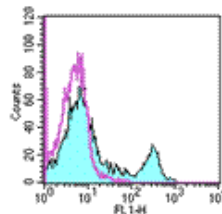


## Product Information

Contents: Affinity Purified anti-mouse CD8a (Ly-2)  
Catalog Number: 14-0081  
Sizes: 50 ug, 100 ug, 500 ug, 1 mg  
Formulation: Phosphate buffer pH 7.2,  
150 mM NaCl, 0.09% NaN<sub>3</sub>  
Storage Conditions: Store at 4°C.  
Avoid repeated freeze/thaw cycles.  
Clone: 53-6.7  
Isotype: Rat IgG2a, κ



*Staining of C57Bl/6 splenocytes with 0.125 µg of purified rat IgG2a isotype control (cat. 14-4321) (open histogram) or 0.125 µg of purified anti-mouse CD8 (53-6.7) (colored histogram) followed by FITC anti-rat IgG (cat. 11-4811). 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, immunoprecipitation, and immunohistochemical staining of frozen tissue sections. It has also been reported in T cell activation, isolation and depletion of CD8<sup>+</sup> cells, and blocking of ligand binding. (Please use Functional Grade purified 53-6.7, cat. 16-0081, in functional assays.)

## 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.

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## Related Products

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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. 15-0081 PE-Cy5 Rat anti-mouse CD8 (alpha subunit; CD8a) (clone 53-6.7)  
Cat. 16-0081 Functional Grade Purified 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. 14-4321 Affinity Purified Rat IgG2a Isotype Control  
Cat. 11-4811 FITC Anti-Rat IgG  
Cat. 13-4813 Biotin Anti-Rat IgG (clone Polyclonal)

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## References

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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.