

CD8a Monoclonal Antibody (53-6.7), Super Bright™ 702, eBioscience™

Product Details	
Size	100 µg
Species Reactivity	Mouse
Published Species	Mouse
Host/Isotype	Rat / IgG2a, kappa
Recommended Isotype Control	Rat IgG2a kappa Isotype Control (eBR2a), Super Bright™ 702, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	53-6.7
Conjugate	Super Bright™ 702
Excitation/Emission Max	413/702 nm
Form	Liquid
Concentration	0.2 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2, with BSA
Contains	0.09% sodium azide
Storage conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_2662351

Applications	Tested Dilution	Publications
Immunohistochemistry (IHC)	-	2 Publications
Flow Cytometry (Flow)	0.25 µg/test	18 Publications

Product Specific Information

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 beta chain (CD8 alpha beta) or as a homodimer (CD8 alpha alpha). A majority of thymocytes and a subpopulation of mature alpha beta TCR T cells express CD8 alpha beta while gamma delta TCR T cells, a subpopulation of intestinal intraepithelial lymphocytes (IELs) and dendritic cells express CD8 alpha alpha. 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.

Applications Reported: This 53-6.7 antibody has been reported for use in flow cytometric analysis.

Applications Tested: This 53-6.7 antibody has been tested by flow cytometric analysis of mouse splenocytes. This can be used at less than or equal to 0.25 µg per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume of 100 µL. Cell number should be determined empirically but can range from 10⁵ to 10⁸ cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

Super Bright 702 is a tandem dye that can be excited with the violet laser line (405 nm) and emits at 702 nm. We recommend using a 710/50 bandpass filter. Please make sure that your instrument is capable of detecting this fluorochrome.

When using two or more Super Bright dye-conjugated antibodies in a staining panel, it is recommended to use Super Bright Staining Buffer ((Product # SB-4400)) to minimize any non-specific polymer interactions. Please refer to the datasheet for Super Bright Staining Buffer.

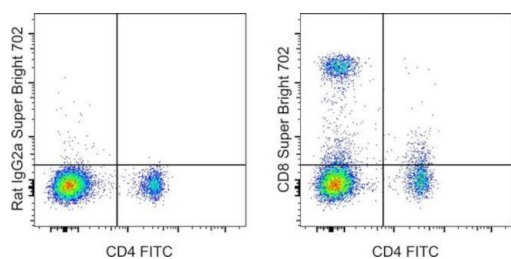
Light sensitivity: This tandem dye is sensitive to photo-induced oxidation. Protect this vial and stained samples from light.

Fixation: Samples can be stored in IC Fixation Buffer (Product # 00-8222) (100 μ L of cell sample + 100 μ L of IC Fixation Buffer) or 1-step Fix/Lyse Solution (Product # 00-5333) for up to 3 days in the dark at 4°C with minimal impact on brightness and FRET efficiency/compensation. Some generalizations regarding fluorophore performance after fixation can be made, but clone specific performance should be determined empirically.

Excitation: 405 nm; Emission: 702 nm; Laser: Violet Laser

Super Bright Polymer Dyes are sold under license from Becton, Dickinson and Company.

Product Images For CD8a Monoclonal Antibody (53-6.7), Super Bright™ 702, eBioscience™



CD8a Antibody (67-0081-82) in Flow

Staining of C57BL/6 splenocytes with Anti-Mouse CD4 FITC (Product # 11-0041-82) and Rat IgG2a K Isotype Control (Product # 67-4321-82) (left) or 0.25 μ g of Anti-Mouse CD8a Super Bright 702 (right). Cells in the lymphocyte gate were used for analysis.

[View more figures on thermofisher.com](https://www.thermofisher.com)

Immunohistochemistry (2)

Scientific reports

Therapeutic potential of highly functional codon-optimized microtrophin for muscle-specific expression.

"Published figure using CD8a monoclonal antibody (Product # 67-0081-82) in Immunohistochemistry"

Authors: Starikova AV, Skopenkova VV, Polikarpova AV, Reshetov DA, Vassilieva SG, Velyaev OA, Schmidt AA, Savchenko IM, Soldatov VO, Egorova TV, Bardina MV

Year
2022

Communications biology

A Cu₉S₅ nanoparticle-based CpG delivery system for synergistic photothermal-, photodynamic- and immunotherapy.

"Published figure using CD8a monoclonal antibody (Product # 67-0081-82) in Immunohistochemistry"

Authors: Zhou L, Chen L, Hu X, Lu Y, Liu W, Sun Y, Yao T, Dong C, Shi S

Year
2020

Flow Cytometry (18)

NPJ vaccines

Specific targeting of IL-1 activity to CD8⁺ T cells allows for safe use as a vaccine adjuvant.

"Published figure using CD8a monoclonal antibody (Product # 67-0081-82) in Flow Cytometry"

Authors: Van Den Eeckhout B, Van Hoecke L, Burg E, Van Lint S, Peelman F, Kley N, Uzé G, Saelens X, Tavernier J, Gerlo S

Year
2023

Frontiers in immunology

CD300a Receptor Blocking Enhances Early Clearance of *Leishmania donovani* From Its Mammalian Host Through Modulation of Effector Functions of Phagocytic and Antigen Experienced T Cells.

"67-0081-82 was used in Flow cytometry/Cell sorting to report that *L. donovani*, which causes visceral leishmaniasis in the Indian subcontinent, upregulates the expression of an immune inhibitory receptor i.e., CD300a on antigen presenting and phagocytic cells to dampen their effector functions."

Authors: Singh R, Anand A, Rawat AK, Saini S, Mahapatra B, Singh NK, Mishra AK, Singh S, Singh N, Kishore D, Kumar V, Das P, Singh RK

Year
2022

Species
Mouse

[View more Flow references on thermofisher.com](https://www.thermofisher.com)

More applications with references on thermofisher.com

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