

CD8a Monoclonal Antibody (53-6.7), Super Bright™ 780, eBioscience™

Product Details	
Size	25 µg
Species Reactivity	Mouse
Published Species	Mouse
Host/Isotype	Rat / IgG2a, kappa
Class	Monoclonal
Type	Antibody
Clone	53-6.7
Conjugate	Super Bright™ 780
Excitation/Emission Max	413/780 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_2722975

Applications	Tested Dilution	Publications
Western Blot (WB)	-	1 Publication
Immunohistochemistry (IHC)	-	2 Publications
Flow Cytometry (Flow)	0.5 µg/test	17 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 0.5 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 780 can be excited with the violet laser line (405 nm) and emits at 780 nm. We recommend using a 780/60 bandpass filter, or equivalent. 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

Complete Staining Buffer (Product # SB-4401) to minimize any non-specific polymer interactions. Please refer to the datasheet for Super Bright Staining Buffer for more information.

In some experiments, we have observed that compensation values for Super Bright 780-conjugated antibodies are higher in the violet 450/50 channel when using UltraComp eBeads microspheres (Product # 01-2222-42) as compared to single-color stained cells. In such circumstances, we would recommend setting compensation with cells. We have also observed this in some experiments using AbC Total Antibody Compensation beads (Product # A10497).

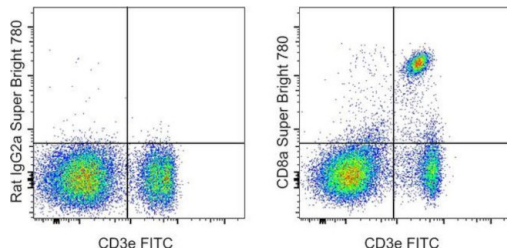
Light sensitivity: This tandem dye is sensitive to photo-induced oxidation. Please protect this vial and stained samples from light.

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: 780 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™ 780, eBioscience™



CD8a Antibody (78-0081-80) in Flow

C57/B6 splenocytes were stained with CD3e Monoclonal Antibody, FITC (Product # 11-0031-82) and 0.25 μ g of Rat IgG2a Kappa Isotype Control, Super Bright 780 (Product # 78-4321-82) (left) or 0.25 μ g of CD8a Monoclonal Antibody, Super Bright 780 (right). Total viable cells were used for analysis.

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

20 References

Western Blot (1)

eLife

Hemozoin produced by mammals confers heme tolerance.

"Published figure using CD8a monoclonal antibody (Product # 78-0081-82) in Western Blot"

Authors: Pek RH, Yuan X, Rietzschel N, Zhang J, Jackson L, Nishibori E, Ribeiro A, Simmons W, Jagadeesh J, Sugimoto H, Alam MZ, Garrett L, Haldar M, Ralle M, Phillips JD, Bodine DM, Hamza I

Year
2019

Immunohistochemistry (2)

Scientific reports

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

"Published figure using CD8a monoclonal antibody (Product # 78-0081-82) in Immunohistochemistry"

Authors: Starikova AV, Skopenkova VV, Polikarpova AV, Reshetov DA, Vassilieva SG, Velyaev OA, Shmidt 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 # 78-0081-82) 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 (17)

STAR protocols

Protocol for PPP1R15A-inhibited mouse model establishment with subcutaneous B16F1 tumor and single-cell analysis.

"Published figure using CD8a monoclonal antibody (Product # 78-0081-82) in Flow Cytometry"

Authors: Wang R, Wang M, Pei S, Zhang Y, Guo S, Guo W, Wu Z, Wang H, Li Y, Zhu Y, Meng LH, Lang J, Jin G, Xiao Y, Hu L, Kong X

Year
2023

[View more Flow references on thermofisher.com](#)

More applications with references on thermofisher.com

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