

CD8a Monoclonal Antibody (53-6.7), Brilliant Violet™ 421, eBioscience™

Product Details	
Size	25 µg
Species Reactivity	Mouse
Host/Isotype	Rat / IgG2a, kappa
Recommended Isotype Control	Rat IgG2a kappa Isotype Control (eBR2a), Brilliant Violet™ 421, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	53-6.7
Conjugate	Brilliant Violet™ 421
Excitation/Emission Max	406/423 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_2921016

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	0.5 µg/test	1 Publication

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 may 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.

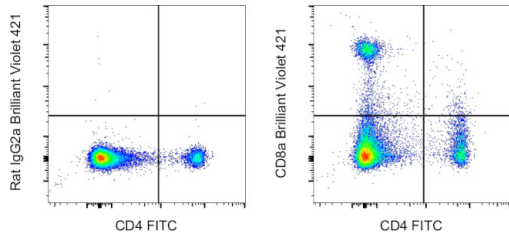
Brilliant Violet™ 421 (BV421) is a dye that emits at 423 nm and is intended for use on cytometers equipped with a violet (405 nm) laser. Please make sure that your instrument is capable of detecting this fluorochrome.

When using two or more Super Bright, Brilliant Violet™, Brilliant Ultra Violet™, or other polymer dye-conjugated antibodies in a staining panel, it is recommended to use Super Bright Complete Staining Buffer (Product # SB-4401-42) or Brilliant Stain Buffer™ (Product # 00-4409-75) to minimize any non-specific polymer interactions. Please refer to the datasheet for Super Bright Staining Buffer or Brilliant Stain Buffer for more information.

Excitation: 407 nm; Emission: 423 nm; Laser: Violet Laser.

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Product Images For CD8a Monoclonal Antibody (53-6.7), Brilliant Violet™ 421, eBioscience™



CD8a Antibody (404-0081-80) in Flow

C57BL/6 mouse splenocytes were stained with CD4 Monoclonal Antibody, FITC (Product # 11-0042-82) and 0.25 µg of Rat IgG2a kappa Isotype Control, Brilliant Violet 421 (Product # 404-4321-81) (left) or 0.25 µg of CD8a Monoclonal Antibody, Brilliant Violet 421 (right). Viable cells in the lymphocyte gate were used for analysis, as determined by 7-AAD (Product # 00-6993-50).

1 Reference

Flow Cytometry (1)

Frontiers in pharmacology

Efficacies of S-nitrosoglutathione (GSNO) and GSNO reductase inhibitor in SARS-CoV-2 spike protein induced acute lung disease in mice.

"Published figure using CD8a monoclonal antibody (Product # 404-0081-82) in Flow Cytometry"

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Year
2024

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