

# CD8a Monoclonal Antibody (53-6.7), Brilliant Ultra Violet™ 496, eBioscience™

Product Details	
Size	25 µg
Species Reactivity	Mouse
Host/Isotype	Rat / IgG2a, kappa
Recommended Isotype Control	Rat IgG2a kappa Isotype Control (eBR2a), Brilliant Ultra Violet™ 496, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	53-6.7
Conjugate	Brilliant Ultra Violet™ 496
Excitation/Emission Max	348/493 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_2920955

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	1.0 µg/test	-

## 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 1.0 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 10<sup>5</sup> to 10<sup>8</sup> cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

Brilliant Ultra Violet™ 496 (BUV496) is a tandem dye that emits at 496 nm and is intended for use on cytometers equipped with an ultraviolet (355 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.

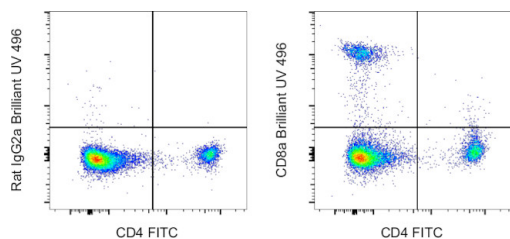
Light sensitivity: This tandem dye is sensitive to photo-induced oxidation. Please protect this vial and stained samples from light.

Fixation: Samples can be stored in IC Fixation Buffer (Product # 00-8222-49) (100  $\mu$ L of cell sample + 100  $\mu$ L of IC Fixation Buffer) or 1-step Fix/Lyse Solution (Product # 00-5333-54) 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: 350 nm; Emission: 496 nm; Laser: Ultraviolet Laser.

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## Product Images For CD8a Monoclonal Antibody (53-6.7), Brilliant Ultra Violet™ 496, eBioscience™



### CD8a Antibody (364-0081-80) in Flow

C57BL/6 mouse splenocytes were stained with CD4 Monoclonal Antibody, FITC (Product # 11-0042-82) and 1.0  $\mu$ g of Rat IgG2a kappa Isotype Control, Brilliant Ultra Violet 496 (Product # 364-4321-81) (left) or 1.0  $\mu$ g of CD8a Monoclonal Antibody, Brilliant Ultra Violet 496 (right). Viable cells in the lymphocyte gate were used for analysis, as determined by 7-AAD (Product # 00-6993-50).

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