

TCR beta Monoclonal Antibody (H57-597), Super Bright™ 645, eBioscience™

Product Details	
Size	100 µg
Species Reactivity	Mouse
Host/Isotype	Armenian hamster / IgG
Recommended Isotype Control	Armenian Hamster IgG Isotype Control (eBio299Arm), Super Bright™ 645, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	H57-597
Conjugate	Super Bright™ 645
Excitation/Emission Max	414/645 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_2723704

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	0.5 µg/test	5 Publications

Product Specific Information

Description: The H57-597 monoclonal antibody reacts with the beta chain of mouse TCR. TCR beta is expressed by thymocytes in a developmentally regulated manner and a majority of peripheral T cells. Crosslinking of the TCR complex with H57-597 induces activation and proliferation of T cells or apoptosis based on assay conditions. H57-597 is used as a phenotypic marker for TCR beta expressing T cells.

Applications Reported: This H57-597 antibody has been reported for use in flow cytometric analysis.

Applications Tested: This H57-597 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.

Super Bright 645 is a tandem dye that can be excited with the violet laser line (405 nm) and emits at 645 nm. We recommend using a 660/20 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 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.

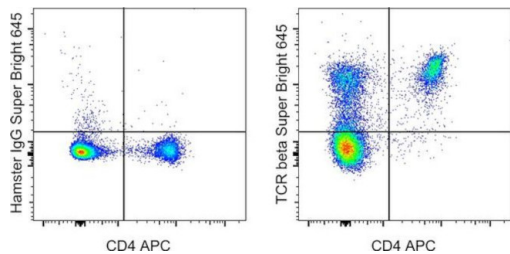
Light sensitivity: This tandem dye is sensitive to photo-induced oxidation. Please protect this vial and stained samples from light.

Fixation: Samples can be stored in IC Fixation Buffer (Product # 00-8222) (100 µL of cell sample + 100 µL 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: 645 nm; Laser: Violet Laser

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

Product Images For TCR beta Monoclonal Antibody (H57-597), Super Bright™ 645, eBioscience™



TCR beta Antibody (64-5961-82) in Flow
Swiss Webster mouse splenocytes were stained with CD4 Monoclonal Antibody, APC (Product # 17-0041-82) and 0.25 µg of Armenian Hamster IgG Isotype Control, Super Bright 645 (Product # 64-4888-82) (left) or 0.25 µg of TCR beta Monoclonal Antibody, Super Bright 645 (right). Cells in the lymphocyte gate were used for analysis.

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5 References

Flow Cytometry (5)

<p>The Journal of experimental medicine</p> <p>Niche-specific MHC II and PD-L1 regulate CD4+CD8+ intraepithelial lymphocyte differentiation.</p> <p>"Published figure using TCR beta monoclonal antibody (Product # 64-5961-82) in Flow Cytometry"</p> <p>Authors: Moon S, Park Y, Hyeon S, Kim YM, Kim JH, Kim H, Park S, Lee KJ, Koo BK, Ha SJ, Lee SW</p>	<p>Year</p> <p>2021</p>
<p>Nature communications</p> <p>B7-CD28 co-stimulation modulates central tolerance via thymic clonal deletion and Treg generation through distinct mechanisms.</p> <p>"Published figure using TCR beta monoclonal antibody (Product # 64-5961-82) in Flow Cytometry"</p> <p>Authors: Watanabe M, Lu Y, Breen M, Hodes RJ</p>	<p>Year</p> <p>2020</p>

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