IL-17A Monoclonal Antibody (eBio17B7), Brilliant Violet™ 650, eBioscience™

Product Details	
Size	25 µg
Species Reactivity	Mouse, Rat
Host/Isotype	Rat / IgG2a, kappa
Recommended Isotype Control	Rat IgG2a kappa Isotype Control (eBR2a), Brilliant Violet™ 650, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	eBio17B7
Conjugate	Brilliant Violet™ 650
Excitation/Emission Max	407/646 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_2925705

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	0.25 µg/test	-

Product Specific Information

Description: The eBio17B7 antibody reacts with mouse and rat IL-17A with no recognition of IL-17F. Interleukin-17A (IL-17A) is a CD4+ T cell-derived cytokine that promotes inflammatory responses in cell lines and is elevated in rheumatoid arthritis, asthma, multiple sclerosis, psoriasis, and transplant rejection. The cDNA encoding human IL-17A was isolated from a library of CD4+ T cells; the encoded protein exhibits 72 percent amino acid identity with HVS13, an open reading frame from a T lymphotropic Herpesvirus saimiri, and 63 percent with mouse CTLA-8 (cytotoxic T-lymphocyte associated antigen-8). Human IL-17A exists as glycosylated 20-30 kD homodimers. High levels of IL-17A homodimer are produced by activated peripheral blood CD4+ T-cells. IL-17A enhances expression of the intracellular adhesion molecule-1 (ICAM-1) in human fibroblasts. Human IL-17A also stimulates epithelial, endothelial, or fibroblastic cells to secrete IL-6, IL-8, G-CSF, and PGE2. In the presence of human IL-17A, fibroblasts can sustain the proliferation of CD34+ hematopoietic progenitors and induce maturation into neutrophils. Mouse, rat, and human IL-17A can induce IL-6 secretion in mouse stromal cells, indicating that all homologs can recognize the mouse IL-17A receptor.^M
^M
IL-23-dependent, IL-17A-producing CD4+ T cells (Th-17 cells) have been identified as a unique subset of Th cells that develops along a pathway that is distinct from the Th1- and Th2- cell differentiation pathways. The hallmark effector molecules of Th1 and Th2 cells, e.g., IFN gamma and IL-4, have each been found to negatively regulate the generation of these Th-17 cells.^M
^M
Applications Reported: This eBio17B7 antibody has been reported for use in intracellular staining followed by flow cytometric analysis.^M
^M
Applications Tested: This eBio17B7 antibody has been tested by intracellular staining followed by flow cytometric analysis of

mouse splenocytes using the Intracellular Fixation & Permeabilization Buffer Set (Product # 88-8824-00) and protocol. Please refer to "Staining Intracellular Antigens for Flow Cytometry, Protocol A: Two step protocol for intracellular (cytoplasmic) proteins" located at Flow Protocols. This may 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 10^5 to 10^8 cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.^M
^M
Brilliant Violet™ 650 (BV650) is a tandem dye that emits at 649 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.^M
^M
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.^M
^M
Light sensitivity: This tandem dye is sensitive to photo-induced oxidation. Please protect this vial and stained samples from light.^M
^M
Fixation: Samples can be stored in IC Fixation Buffer (Product # 00-8222-49) (100 µL of cell sample + 100 µL of IC Fixation Buffer) or 1-step Fix/Lyse Solution (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.^M
^M
Our internal testing suggests that Brilliant Violet™ 650 (BV650) is not compatible with methanol-based fixation.^M
^M
Excitation: 407 nm; Emission: 649 nm; Laser: Violet Laser.^M
^M
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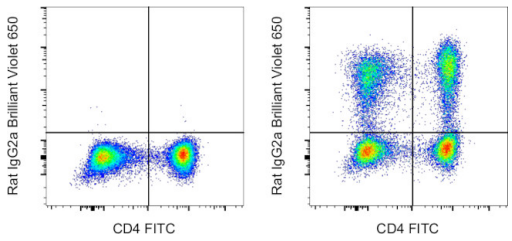
Product Images For IL-17A Monoclonal Antibody (eBio17B7), Brilliant Violet™ 650, eBioscience™



IL-17A Antibody (416-7177-80) in Flow
Th17-polarized BALB/c mouse splenocytes were stimulated for 5 hours with the Cell Stimulation Cocktail (plus protein transport inhibitors) (Product # 00-4975-03). Cells were then stained intracellularly, using the Intracellular Fixation & Permeabilization Buffer Set (Product # 88-8824-00) and protocol, with CD4 Monoclonal Antibody, FITC (Product # 11-0042-82) and 0.125 µg of Rat IgG2a kappa Isotype Control, Brilliant Violet 650 (Product # 416-4321-81) (left) or 0.125 µg of IL-17A Monoclonal Antibody, Brilliant Violet 650 (right). Viable cells in the lymphocyte gate were used for analysis, as determined by LIVE/DEAD™ Fixable Aqua Dead Cell Stain Kit (Product # L34966).