IL-17A Monoclonal Antibody (eBio64DEC17), PE, eBioscience™

Product Details	
Size	100 Tests
Species Reactivity	Human
Published Species	Dog, Human, Rhesus monkey
Host/Isotype	Mouse / IgG1, kappa
Recommended Isotype Control	Mouse IgG1 kappa Isotype Control (P3.6.2.8.1), PE, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	eBio64DEC17
Conjugate	PE
Form	Liquid
Concentration	5 µL/Test
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2, with 0.1% gelatin, 0.2% BSA
Contains	0.09% sodium azide
Storage conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_1724136

Applications	Tested Dilution	Publications
Immunocytochemistry (ICC/IF)	-	2 Publications
Flow Cytometry (Flow)	5 µL (0.25 µg)/test	55 Publications

Product Specific Information

Description: The eBio64DEC17 antibody reacts with human IL-17A. The eBio64DEC17 antibody is a neutralizing antibody. 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.

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.

Intracellular staining by eBio64DEC17 antibody identifies the same cell population as the eBio64CAP17 antibody, as can be seen in co-staining experiments using both antibodies.

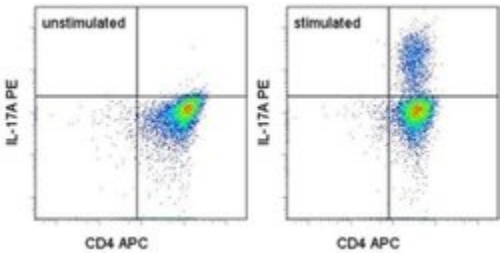
Applications Reported: This eBio64DEC17 antibody has been reported for use in intracellular staining followed by flow cytometric analysis.

Applications Tested: This eBio64DEC17 antibody has been pre-titrated and tested by intracellular staining and flow cytometric analysis of stimulated normal human peripheral blood cells. This can be used at 5 µL (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.

Excitation: 488-561 nm; Emission: 578 nm; Laser: Blue Laser, Green Laser, Yellow-Green Laser.

Filtration: 0.2 µm post-manufacturing filtered.

Product Images For IL-17A Monoclonal Antibody (eBio64DEC17), PE, eBioscience™



IL-17A Antibody (12-7179-42) in Flow
CD4-enriched human peripheral blood cells were polarized under Th17 conditions (with Human IL-23 Recombinant Protein (Product # 14-8239-63) for 10 days. Cells were restimulated with Protein Transport Inhibitor Cocktail (Product # 00-4980-03) (left) or Cell Stimulation Cocktail (plus protein transport inhibitors) (Product # 00-4975-03) (right) for 6 hours. Cells were intracellular stained with Anti-Human CD4 APC (Product # 17-0049-42) and Anti-Human IL-17A FITC using the Fixation & Permeabilization Buffers (Product # 88-8824-00). Viable cells, as determined by Fixable Viability Dye eFluor® 450 (Product # 65-0863-14), were used for analysis.

57 References

Immunocytochemistry (2)

International journal of cancer

NY-ESO-1 specific antibody and cellular responses in melanoma patients primed with NY-ESO-1 protein in ISCOMATRIX and boosted with recombinant NY-ESO-1 fowlpox virus.

"12-7179 was used in Immunocytochemistry-immunoflourescence to examine whether heterologous prime-boost strategies based on the combination with NY-ESO-1 ISCOMATRIX with different NY-ESO-1 boosting reagents could increase NY-ESO-1 CD8(+) or CD4(+) T cell responses."

Authors: Chen JL,Dawoodji A,Tarlton A,Gnjatic S,Tajar A,Karydis I,Browning J,Pratap S,Verfaille C,Venhaus RR,Pan L,Altman DG,Cebon JS,Old LL,Nathan P,Ottensmeier C,Middleton M,Cerundolo V

Species Human

Dilution Not Cited

Year 2015

Journal of immunology (Baltimore, Md. : 1950)

Memory CCR6+CD4+ T cells are preferential targets for productive HIV type 1 infection regardless of their expression of integrin 7.

"12-7179 was used in Immunocytochemistry to show that, regardless of their integrin expression, productive HIV type 1 infection preferentially targets memory CCR6+CD4+ T cells."

Authors: Monteiro P,Gosselin A,Wacleche VS,El-Far M,Said EA,Kared H,Grandvaux N,Boulassel MR,Routy JP,Ancuta P

Species Human

Dilution Not Cited

Year 2011

Flow Cytometry (55)

Oncoimmunology

Immune-checkpoint blockade of CTLA-4 (CD152) in antigen-specific human T-cell responses differs profoundly between neonates, children, and adults.

"12-7179-42 was used in Flow Cytometry to show that T-cell proliferation as well as frequencies of antigen-specific T-cells (CD40L+CD4+) were enhanced in neonatal T-cells upon CTLA-4 blockade."

Authors: Arra A,Pech M,Fu H,Lingel H,Braun F,Beyer C,Spiliopoulou M,Bröker BM,Lampe K,Arens C,Vogel K,Pierau M,Brunner-Weinzierl MC

Species Human

Dilution Not Cited

Year 2021

Frontiers in immunology

IL-12-Induced Immune Suppressive Deficit During CD8+ T-Cell Differentiation.

"12-7179 was used in Flow cytometry/Cell sorting to provide insights into the role of T-cell differentiation in CD8 suppressive biology and may reveal therapeutically targetable pathways to reverse suppressive deficit during immune-mediated disease."

Authors: Renavikar PS,Sinha S,Brate AA,Borcherding N,Crawford MP,Steward-Tharp SM,Karandikar NJ

Species Human

Dilution Not Cited

Year 2021

View more Flow references on thermofisher.com

More applications with references on thermofisher.com