

Pacific Blue™ anti-human IL-17A Antibody

Catalog# / Size	512311 / 25 tests 512312 / 100 tests
Clone	BL168
Regulatory Status	RUO
Other Names	Interleukin IL-17A, IL-17, Cytotoxic T lymphocyte-associated antigen 8 (CTLA-8)
Isotype	Mouse IgG1, κ
Description	IL-17A is the founding member of the IL-17 family, a group of six structurally related pro-inflammatory cytokines. IL-17A, secreted by activated CD4 ⁺ Th17 cell subpopulation, elicits multiple biological activities on a variety of cells including: the induction of IL-6, IL-8, G-CSF, and PGE2 production in epithelial, endothelial or fibroblasts; the enhancement of surface expression of ICAM-1 in fibroblasts; activation of NF- κ B and costimulation of T cell proliferation. Recent studies demonstrated that, in mice, activated IL-17-secreting CD4 ⁺ helper T cells (Th17 cells) mediate an autoimmune arthritis that clinically and immunologically resembles rheumatoid arthritis (RA). Human IL-17A shows 63%, 63%, and 72% amino acid sequence identity to rat IL-17A, mouse IL-17A, and a protein encoded by the ORF13 gene of herpesvirus Saimiri (HVS), respectively.

Product Details

Verified Reactivity	Human
Antibody Type	Monoclonal
Host Species	Mouse
Immunogen	Recombinant full length human IL-17A
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA)
Preparation	The antibody was purified by affinity chromatography, and conjugated with Pacific Blue™ under optimal conditions.
Concentration	Lot-specific (to obtain lot-specific concentration, please enter the lot number in our Concentration and Expiration Lookup or Certificate of Analysis online tools.)
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. Do not freeze.
Application	ICFC - Quality tested
Recommended Usage	Each lot of this antibody is quality control tested by intracellular immunofluorescent staining with flow cytometric analysis . For flow cytometric staining, the suggested use of this reagent is $\leq 1.0 \mu\text{g}$ per 10^6 cells in 100 μl volume or 100 μl of whole blood. It is recommended that the reagent be titrated for optimal performance for each application. * Pacific Blue™ has a maximum emission of 455 nm when it is excited at 405 nm. Prior to using Pacific Blue™ conjugate for flow cytometric analysis, please verify your flow cytometer's capability of exciting and detecting the fluorochrome. Alexa Fluor® and Pacific Blue™ are trademarks of Life Technologies Corporation. View full statement regarding label licenses
Excitation Laser	Violet Laser (405 nm)
Product Citations	1. Sara Ricciardi <i>et al.</i> 2018. Cell metabolism. 28(6):895-906 . PubMed 2. Limagne E, <i>et al.</i> 2016. Cancer Res. 76: 5241 - 5252. PubMed 3. Dupraz L, <i>et al.</i> 2021. Cell Reports. 36(1):109332. PubMed
RRID	AB_961393 (BioLegend Cat. No. 512311)

Antigen Details

Structure	Cytokine; dimer; ~15 kD (Mammalian)
Bioactivity	Secretion of IL-6, IL-8, G-CSF, prostaglandin E2 by epithelial, endothelial or fibroblastic cells; stimulates cell migration, cord formation, and IL-6 secretion by stromal cells
Cell Sources	Activated T cell subpopulation
Cell Targets	Fibroblasts, epithelial and endothelial cells, stromal cells
Receptors	IL-17R
Cell Type	Tregs
Biology Area	Cell Biology, Immunology, Neuroinflammation, Neuroscience
Molecular Family	Cytokines/Chemokines
Antigen References	<ol style="list-style-type: none"> 1. Hirota K, <i>et al.</i> 2007. <i>J. Exp. Med.</i> 204:41. 2. Furuzawa-Carballeda J, <i>et al.</i> 2007. <i>Autoimmun. Rev.</i> 6:169. 3. Witowski J, <i>et al.</i> 2007. <i>Kidney Int.</i> 71:514. 4. Gaffen SL, <i>et al.</i> 2006. <i>Vitam. Horm.</i> 74:255. 5. Hymowitz S, <i>et al.</i> 2001. <i>EMBO J.</i> 20:5332.
Gene ID	3605

Related Protocols

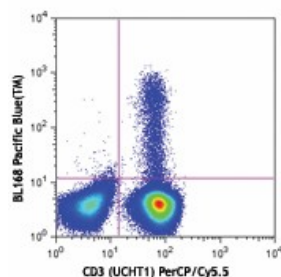
[Surface and Intracellular Cytokine Staining for Flow Cytometry - Video](#)

[Intracellular Flow Cytometry Staining Protocol](#)

Other Formats

Brilliant Violet 421™ anti-human IL-17A, Purified anti-human IL-17A, FITC anti-human IL-17A, PE anti-human IL-17A, Alexa Fluor® 488 anti-human IL-17A, Alexa Fluor® 647 anti-human IL-17A, Pacific Blue™ anti-human IL-17A, PerCP/Cyanine5.5 anti-human IL-17A, PE/Cyanine7 anti-human IL-17A, Alexa Fluor® 700 anti-human IL-17A, APC/Cyanine7 anti-human IL-17A, Brilliant Violet 570™ anti-human IL-17A, Brilliant Violet 605™ anti-human IL-17A, Brilliant Violet 711™ anti-human IL-17A, Brilliant Violet 510™ anti-human IL-17A, APC anti-human IL-17A, Purified anti-human IL-17A (Maxpar® Ready), PE/Dazzle™ 594 anti-human IL-17A, Brilliant Violet 785™ anti-human IL-17A

Product Data



PMA (50 ng/ml) +ionomycin (1 µg/ml)-stimulated (6 hours + monensin, 2 µM) human peripheral blood lymphocytes intracellularly stained with BL168 Pacific Blue™ and CD3 (UCHT1) PerCP/Cy5.5

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