

## Pacific Blue™ anti-mouse IL-17A Antibody

<b>Catalog# / Size</b>	506917 / 25 µg 506918 / 100 µg
<b>Clone</b>	TC11-18H10.1
<b>Regulatory Status</b>	RUO
<b>Other Names</b>	Interleukin-17, Cytotoxic T lymphocyte-associated antigen 8 (CTLA-8)
<b>Isotype</b>	Rat IgG1, κ
<b>Description</b>	IL-17, also known as CTLA-8, is a T cell-expressed pleiotropic cytokine that exhibits a high degree of homology to a protein encoded by the ORF13 gene of herpes virus Saimiri. IL-17 is produced by Th cells (Th17) that are distinct from the traditional Th1- and Th2-cell subsets. IL-23 plays an important role in triggering IL-17 production. Both recombinant and natural IL-17 have been shown to exist as disulfide linked homodimers. IL-17 exhibits multiple biological activities on a variety of cells including: the induction of IL-6 and IL-8 production in fibroblasts, activation of NF-κB, and costimulation of T cell proliferation. IL-17 is an essential inflammatory mediator in the development of autoimmune diseases. Neutralization of IL-17 with monoclonal antibody is able to ameliorate the disease course.

### Product Details

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<b>Verified Reactivity</b>	Mouse
<b>Antibody Type</b>	Monoclonal
<b>Host Species</b>	Rat
<b>Immunogen</b>	<i>E. coli</i> expressed, recombinant mouse IL-17A
<b>Formulation</b>	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.
<b>Preparation</b>	The antibody was purified by affinity chromatography, and conjugated with Pacific Blue™ under optimal conditions.
<b>Concentration</b>	0.5 mg/ml
<b>Storage &amp; Handling</b>	The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. <b>Do not freeze.</b>
<b>Application</b>	<a href="#">ICFC - Quality tested</a>
<b>Recommended Usage</b>	Each lot of this antibody is quality control tested by <a href="#">intracellular immunofluorescent staining with flow cytometric analysis</a> . For flow cytometric staining, the suggested use of this reagent is ≤0.25 µg per million 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.  <a href="#">View full statement regarding label licenses</a>
<b>Excitation Laser</b>	Violet Laser (405 nm)
<b>Application Notes</b>	<b>ELISA Capture</b> <sup>3,4</sup> and <b>ELISPOT Capture</b> <sup>5</sup> : The purified TC11-18H10.1 antibody is useful as the capture antibody in a sandwich ELISA, when used in conjunction with the biotinylated TC11-8H4 antibody (Cat. No. 507002) as the detecting antibody and recombinant mouse IL-17 (Cat. No. 576009) as the standard. <b>Flow Cytometry</b> <sup>2-4,7,8,11,12</sup> : The TC11-18H10.1 antibody is useful for intracellular immunofluorescent staining and flow cytometric analysis to identify IL-17-producing cells within mixed cell populations. <b>Neutralization</b> <sup>6,9</sup> : The LEAF™ purified antibody (Endotoxin <0.1 EU/µg, Azide-Free, 0.2 µm

filtered) is recommended for neutralization of mouse IL-17 bioactivity *in vivo* and *in vitro* (Cat. No. 506906).

## Application References

(PubMed link indicates BioLegend citation)

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5. Nekrasova T, *et al.* 2005. *J. Immunol.* 175:2734. (ELISPOT Capture)
6. Yen D, *et al.* 2006. *J. Clin. Invest.* 116:1310. (Neut)
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11. Wang C, *et al.* 2009. *Mucosal Immunol* 2:173. (ICFC) [PubMed](#)
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## Product Citations

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12. McCauley ME, *et al.* 2020. *Nature.* 585(7823):96-101. [PubMed](#)
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## RRID

AB\_893545 (BioLegend Cat. No. 506917)  
AB\_893544 (BioLegend Cat. No. 506918)

## Antigen Details

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<b>Structure</b>	Cytokine; dimer; 15 kD (Mammalian).
<b>Bioactivity</b>	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
<b>Cell Sources</b>	CD4 <sup>+</sup> memory T cells
<b>Cell Targets</b>	Fibroblasts, epithelial and endothelial cells, stromal cells
<b>Receptors</b>	IL-17R (CD217)
<b>Biology Area</b>	Cell Biology, Immunology, Neuroinflammation, Neuroscience
<b>Molecular Family</b>	Cytokines/Chemokines
<b>Antigen References</b>	<ol style="list-style-type: none"><li>1. Fitzgerald K, <i>et al.</i> Eds. 2001. <i>The Cytokine FactsBook.</i> Academic Press San Diego.</li><li>2. Numasaki M, <i>et al.</i> 2002. <i>Blood</i> 101:2620.</li><li>3. Fossiez F, <i>et al.</i> 1996. <i>J. Exp. Med.</i> 183:2593.</li><li>4. Yao Z, <i>et al.</i> 1997. <i>Cytokine</i> 9:794.</li><li>5. Dong C. 2006. <i>Nat. Rev. Immunol.</i> 6:329.</li><li>6. Hofstetter HH, <i>et al.</i> 2005 <i>Cell. Immunol.</i> 237:123.</li></ol>
<b>Gene ID</b>	<a href="#">16171</a>

## Related Protocols

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

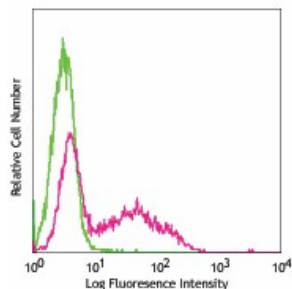
## Other Formats

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PE anti-mouse IL-17A, Purified anti-mouse IL-17A, FITC anti-mouse IL-17A, Alexa Fluor® 488 anti-mouse IL-17A, Alexa Fluor® 647 anti-mouse IL-17A, Alexa Fluor® 700 anti-mouse IL-17A, APC anti-mouse IL-17A, Pacific Blue™ anti-mouse IL-17A, PerCP/Cyanine5.5 anti-mouse IL-17A, PE/Cyanine7 anti-mouse IL-17A, Brilliant Violet 421™ anti-mouse IL-17A, Brilliant Violet 605™ anti-mouse IL-17A, Brilliant Violet 650™ anti-mouse IL-17A, Brilliant Violet 785™ anti-mouse IL-17A, Brilliant Violet 510™ anti-mouse IL-17A, Purified anti-mouse IL-17A (Maxpar® Ready), PE/Dazzle™ 594 anti-mouse IL-17A, APC/Cyanine7 anti-mouse IL-17A, Brilliant Violet 711™ anti-mouse IL-17A, PerCP anti-mouse IL-17A, Ultra-LEAF™ Purified anti-mouse IL-17A

## Product Data

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PMA (20 ng/ml) + ionomycin (1 µg/ml) - stimulated (6 hours + monensin, 2 µM) mouse thymoma cell line EL-4 intracellularly stained with TC11-18H10.1 Pacific Blue&trade

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