

Ultra-LEAF™ Purified anti-mouse IL-17A Antibody

Catalog# / Size	506945 / 100 µg 506946 / 1 mg
Clone	TC11-18H10.1
Regulatory Status	RUO
Other Names	Interleukin-17, Cytotoxic T lymphocyte-associated antigen 8 (CTLA-8)
Isotype	Rat IgG1, κ
Description	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

Verified Reactivity	Mouse
Antibody Type	Monoclonal
Host Species	Rat
Immunogen	<i>E. coli</i> expressed, recombinant mouse IL-17A
Formulation	0.2 µm filtered in phosphate-buffered solution, pH 7.2, containing no preservative. Endotoxin level is <0.01 EU/µg of the protein (<0.001 ng/µg of the protein) as determined by the LAL test.
Preparation	The Ultra-LEAF™ (Low Endotoxin, Azide-Free) antibody was purified by affinity chromatography.
Concentration	The antibody is bottled at the concentration indicated on the vial, typically between 2 mg/mL and 3 mg/mL. Older lots may have also been bottled at 1 mg/mL. 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. This Ultra-LEAF™ solution contains no preservative; handle under aseptic conditions.
Application	ELISA Capture - Quality tested CyTOF® - Verified ELISPOT Capture, ICFC - Reported in the literature, not verified in house
Recommended Usage	Each lot of this antibody is quality control tested by ELISA assay . For ELISA capture, a concentration range of 2-6 µg/ml is recommended. To obtain a linear standard curve, serial dilutions of IL-17 recombinant protein ranging from 4000 to 30 pg/ml are recommended for each ELISA plate. It is recommended that the reagent be titrated for optimal performance for each application.
Application Notes	ELISA Capture ^{3,4} and ELISPOT Capture ⁵ : 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. Flow Cytometry ^{2-4,7,8,11,12} : 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. Neutralization ^{6,9} : The LEAF™ purified antibody (Endotoxin <0.1 EU/µg, Azide-Free, 0.2 µm filtered) is recommended for neutralization of mouse IL-17 bioactivity <i>in vivo</i> and <i>in vitro</i> (Cat. No. 506906).

Application References

(PubMed link indicates
BioLegend citation)

1. Kennedy J, *et al.* 1996. *J. Interferon Cytokine Res.* 16:611.
2. Schubert D, *et al.* 2004. *J. Immunol.* 172:4503. (ICFC)
3. Infante-Duarte C, *et al.* 2000. *J. Immunol.* 165:6107. (ICFC, ELISA Capture)
4. Harrington LE, *et al.* 2005. *Nature Immunol.* doi:10.1038/ni1254. (ICFC, ELISA Capture)
5. Nekrasova T, *et al.* 2005. *J. Immunol.* 175:2734. (ELISPOT Capture)
6. Yen D, *et al.* 2006. *J. Clin. Invest.* 116:1310. (Neut)
7. Ehrchiou D, *et al.* 2007. *J. Exp. Med.* 204:1519. (ICFC)
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12. Cui Y, *et al.* 2009. *Invest. Ophth. Vis. Sci.* 50:5811. (ICFC) [PubMed](#)
13. Kivisäkk P, *et al.* 2009. *Ann. Neurol.* 65:457. [PubMed](#)
14. Cooney LA, *et al.* 2011. *J. Immunol.* 187:4440. [PubMed](#)
15. Ma Y, *et al.* 2012. *PLoS One.* 7:e40763. [PubMed](#)
16. Murakami R, *et al.* 2013. *PLoS One.* 8:73270. [PubMed](#)

RRID AB_2783334 (BioLegend Cat. No. 506945)
AB_2783335 (BioLegend Cat. No. 506946)

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	CD4 ⁺ memory T cells
Cell Targets	Fibroblasts, epithelial and endothelial cells, stromal cells
Receptors	IL-17R (CD217)
Biology Area	Cell Biology, Immunology, Neuroinflammation, Neuroscience
Molecular Family	Cytokines/Chemokines
Antigen References	<ol style="list-style-type: none">1. Fitzgerald K, <i>et al.</i> Eds. 2001. <i>The Cytokine FactsBook</i>. Academic Press San Diego.2. Numasaki M, <i>et al.</i> 2002. <i>Blood</i> 101:2620.3. Fossiez F, <i>et al.</i> 1996. <i>J. Exp. Med.</i> 183:2593.4. Yao Z, <i>et al.</i> 1997. <i>Cytokine</i> 9:794.5. Dong C. 2006. <i>Nat. Rev. Immunol.</i> 6:329.6. Hofstetter HH, <i>et al.</i> 2005 <i>Cell. Immunol.</i> 237:123.
Gene ID	16171

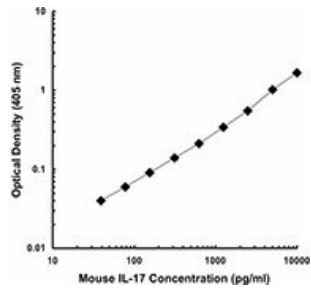
Related Protocols

[Sandwich ELISA Protocol](#)

Other Formats

PE anti-mouse IL-17A, Purified anti-mouse IL-17A, LEAF™ 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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BioLegend Inc., 8999 BioLegend Way, San Diego, CA 92121 www.biolegend.com
Toll-Free Phone: 1-877-Bio-Legend (246-5343) Phone: (858) 768-5800 Fax: (877) 455-9587