

# Product Data Sheet

## Pacific Blue™ anti-mouse IL-17A

**Catalog # / Size:** 506917 / 25 µg  
506918 / 100 µg

**Clone:** TC11-18H10.1

**Isotype:** Rat IgG1, κ

**Immunogen:** *E. coli*-expressed, recombinant mouse IL-17A

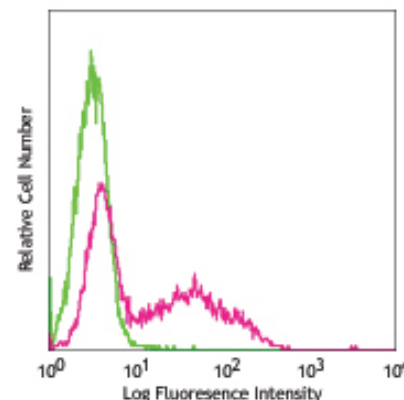
**Reactivity:** Mouse

**Preparation:** The antibody was purified by affinity chromatography, and conjugated with Pacific Blue™ under optimal conditions. The solution is free of unconjugated Pacific Blue™.

**Formulation:** Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.

**Concentration:** 0.5 mg/ml

**Storage:** The antibody solution should be stored undiluted at 4°C and protected from prolonged exposure to light. **Do not freeze.**



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

## Applications:

**Applications:** ICFC - *Quality tested*

**Recommended Usage:** Each lot of this antibody is quality control tested by intracellular immunofluorescent staining with flow cytometric analysis. For immunofluorescent 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.

\*\* Pacific Blue™ is a registered trademark of Molecular Probes, Inc. Pacific Blue™ dye antibody conjugates are sold under license from Molecular Probes, Inc. for research use only, except for use in combination with microarrays and high content screening, and are covered by pending and issued patents.

**Application Notes:** **ELISA Capture<sup>3,4</sup> and ELISPOT Capture<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. 564101) as the standard.  
**Flow Cytometry<sup>2-4,7,8,11,12</sup>:** The fluorochrome-labeled TC11-18H10.1 antibody is useful for intracellular immunofluorescent staining and flow cytometric analysis to identify IL-17 -producing cells within mixed cell populations. For intracellular cytokine staining protocol, please visit [www.biolegend.com](http://www.biolegend.com) and click on the support section.

**Neutralization<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).

**Additional reported applications (for the relevant formats) include:** Western blotting.

**Application References:**

- Kennedy J, *et al.* 1996. *J. Interferon Cytokine Res.* 16:611.
- Schubert D, *et al.* 2004. *J. Immunol.* 172:4503. (FC)
- Infante-Duarte C, *et al.* 2000. *J. Immunol.* 165:6107. (FC, ELISA Capture)
- Harrington LE, *et al.* 2005. *Nature Immunol.* doi:10.1038/ni1254. (FC, ELISA Capture)
- Nekrasova T, *et al.* 2005. *J. Immunol.* 175:2734. (ELISPOT Capture)
- Yen D, *et al.* 2006. *J. Clin. Invest.* 116:1310. (Neut)
- Ehrichtou D, *et al.* 2007. *J. Exp. Med.* 204:1519. (FC)
- Kang SG, *et al.* 2007. *J. Immunol.* 179:3724. (FC)
- Smith E, *et al.* 2008. *J. Immunol.* 181:1357. (Neut) PubMed
- Neufert C, *et al.* 2007. *Eur. J. Immunol.* 37:1809. PubMed
- Wang C, *et al.* 2009. *Mucosal Immunol* 2:173. (FC) PubMed
- Cui Y, *et al.* 2009. *Invest. Ophth. Vis. Sci.* 50:5811. (FC) PubMed
- Kivisäkk P, *et al.* 2009. *Ann. Neurol.* 65:457. PubMed
- Cooney LA, *et al.* 2011. *J. Immunol.* 187:4440. PubMed

**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. Recent study has shown that IL-17 is produced by Th



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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- $\kappa$ B, 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.

- Antigen References:**
1. Fitzgerald K, *et al.* Eds. 2001. The Cytokine FactsBook. Academic Press San Diego.
  2. Numasaki M, *et al.* 2002. *Blood* 101:2620.
  3. Fossiez F, *et al.* 1996. *J. Exp. Med.* 183:2593.
  4. Yao Z, *et al.* 1997. *Cytokine* 9:794.
  5. Dong C. 2006. *Nat. Rev. Immunol.* 6:329.
  6. Hofstetter HH, *et al.* 2005 *Cell. Immunol.* 237:123.

Related Products:	Product	Clone	Application
	Cell Staining Buffer		FC, ICC, ICFC
	Fixation Buffer		ICC, ICFC
	Permeabilization Wash Buffer (10X)		ICC, ICFC, IHC
	Brefeldin A Solution (1,000X)		ICFC
	Monensin Solution (1,000X)		ICFC
	Pacific Blue™ Rat IgG1, $\kappa$ Isotype Ctrl	RTK2071	FC, ICFC



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