Alexa Fluor® 488 anti-mouse IL-17A

Catalog # / Size: 3134545 / 25 μg

3134550 / 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

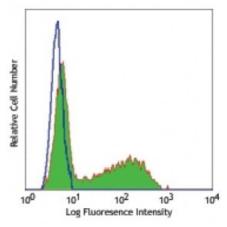
chromatography, and conjugated with Alexa Fluor® 488 under optimal

conditions.

Formulation: Phosphate-buffered solution, pH 7.2,

containing 0.09% sodium azide.

Concentration: 0.5



PMA (20 ng/ml) + ionomycin (1 microg/ml) -stimulated (6 hours + monensin, 2 μ M) mouse thymoma cell line EL-4 intracellularly stained with TC11-18H10.1 Alexa Fluor® 488

Applications:

Applications: Flow Cytometry

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 0.25 microg per million cells in 100 microL volume. It is recommended that the reagent be titrated for optimal

performance for each application.

* Alexa Fluor \circledR 488 has a maximum emission of 519 nm when it is excited at 488

nm.

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 LEAFTM purified antibody (Endotoxin <0.1 EU/ μ g, Azide-Free, 0.2 μ m 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:

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. Ehirchiou D, et al. 2007. J. Exp. Med. 204:1519. (ICFC)

8. Kang SG, et al. 2007. J. Immunol. 179:3724. (ICFC)

- 9. Smith E, et al. 2008. J. Immunol. 181:1357. (Neut) PubMed
- 10. Neufert C, et al. 2007. Eur. J. Immunol. 37:1809. PubMed
- 11. Wang C, et al. 2009. Mucosal Immunol 2:173. (ICFC) PubMed
- 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

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-kB, 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,