Product Data Sheet

PE anti-mouse IL-17A

Catalog # / Size: 3134520 / 100 μg

3134515 / 25 μg

Clone: TC11-18H10.1

Immunogen: E. coli expressed, recombinant mouse

IL-17A

Rat IgG1, ĸ

Reactivity: Mouse

Isotype:

Preparation: The antibody was purified by affinity

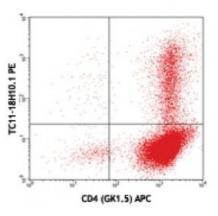
chromatography, and conjugated with PE under optimal conditions. The solution is free of unconjugated PE and

unconjugated antibody.

Formulation: Phosphate-buffered solution, pH 7.2,

containing 0.09% sodium azide.

Concentration: 0.2



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 PE

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 ≤0.25 microg per million cells

in 100 microL volume. It is recommended that the reagent be titrated for optimal performance for

each application.

Application Notes:

ELISA Capture^{3,4} and ELISPOT

Capture⁵: 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).

CD4 (GK1.5) APC

PMA/ionomycin-stimulated (5 hours) Th17 polarized C57BL/6 mouse CD4+ T cells surface stained with CD4 (GK1.5) APC, then intracellularly stained with TC11-18H10.1 PE

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,