Brilliant Violet 711™ anti-mouse IL-17A

Catalog # / Size: 3134705 / 50 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 Brilliant Violet 711™ under optimal conditions. The solution is free of unconjugated Brilliant Violet 711™ and

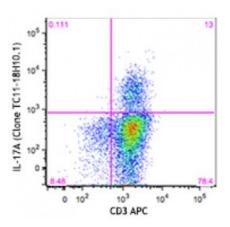
unconjugated antibody.

Formulation: Phosphate-buffered solution, pH 7.2,

containing 0.09% sodium azide and BSA

(origin USA).

Concentration: Lot-specific



Th17-polarized mouse CD4+ lymphocytes were stimulated with PMA + lonomycin for in the presence of monensin (4 hours), fixed, permeabilized, and then stained with CD3 APC and IL-17A (clone TC11-18H10.1) Brilliant Violet 711™ (top) or rat lgG1, &kapp

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 ≤0.5 microg per million cells in 100 microL volume. It is

recommended that the reagent be titrated for optimal performance for

each application.

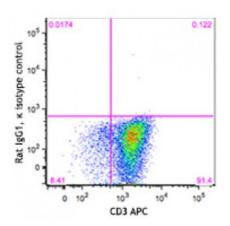
Brilliant Violet 711™ excites at 405 nm and emits at 711 nm. The bandpass filter 710/50 nm is recommended for detection, although filter optimization may be required depending on other fluorophores used. Be sure to verify that your cytometer configuration and software setup are appropriate for detecting this channel. Refer to your instrument manual or

manufacturer for support. Brilliant Violet 711™ is a trademark of Sirigen Group

Ltd.

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^m 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,