SONY

Product Data Sheet

Brilliant Violet 605™ anti-mouse IL-17A

Catalog # / Size: 3134635 / 125 µl

Clone: TC11-18H10.1

Isotype: Rat IgG1, κ

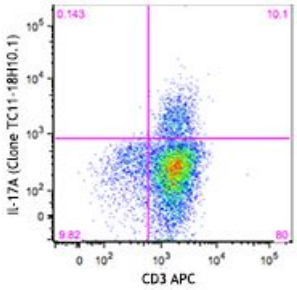
Immunogen: *E. coli* expressed, recombinant mouse IL-17A

Reactivity: Mouse

Preparation: The antibody was purified by affinity chromatography and conjugated with Brilliant Violet 605™ under optimal conditions.

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA).

Concentration: Lot-specific



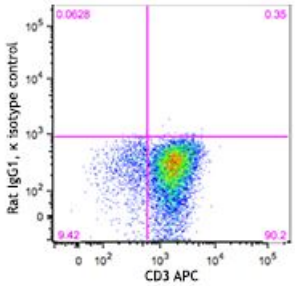
Th17-polarized mouse CD4$^+$ lymphocytes were stimulated with PMA + Ionomycin in the presence of monensin (4 hours), fixed, permeabilized, and then stained with CD3 APC and IL-17A (clone TC11-18H10.1) Brilliant Violet 605™ (top) or rat IgG1, κBrilliant Violet 605™ isotype control (bottom).

Applications:

Applications: Intracellular Staining for 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 ≤5 µl per million cells or 5 µl per 100 µl of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.

Brilliant Violet 605™ excites at 405 nm and emits at 603 nm. The bandpass filter 610/20 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 605™ is a trademark of Sirigen Group Ltd.



Th17-polarized mouse CD4$^+$ lymphocytes were stimulated with PMA + Ionomycin in the presence of monensin (4 hours), fixed, permeabilized, and then stained with CD3 APC and IL-17A (clone TC11-18H10.1) Brilliant Violet 605™ (top) or rat IgG1

For research use only. Not for diagnostic use. Not for resale. Sony Biotechnology Inc. will not be held responsible for patent infringement or other violations that may occur with the use of our products.
Sony Biotechnology Inc. 1730 North First Street, San Jose, CA 95112 www.sonybiotechnology.com

Application Notes:

Other Capture[3,4] and ELISPOT Capture[5]: The purified TC11-18H10.1 antibody is useful as the capture antibody in a sandwich Other, 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 *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, Other Capture)
4. Harrington LE, *et al.* 2005. *Nature Immunol.* doi:10.1038/ni1254. (ICFC, Other 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. Kivisakk 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-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.

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.

For research use only. Not for diagnostic use. Not for resale. Sony Biotechnology Inc. will not be held responsible for patent infringement or other violations that may occur with the use of our products.