SONY

Product Data Sheet

Brilliant Violet 650™ anti-mouse IL-17A

Catalog # / Size: 3134650 / 50 µg
3134645 / 125 µl

Clone: TC11-18H10.1

Isotype: Rat IgG1, κ

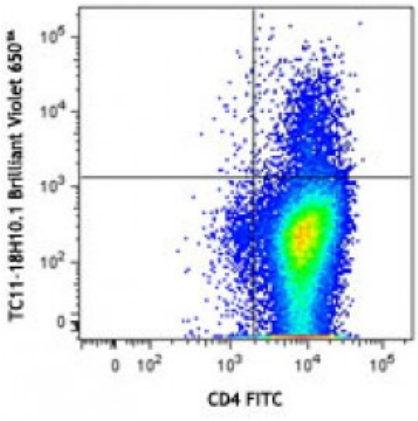
Immunogen: *E. coli* expressed, recombinant mouse IL-17A

Reactivity: Mouse

Preparation: The antibody was purified by affinity chromatography and conjugated with Brilliant Violet 650™ under optimal conditions. The solution is free of unconjugated Brilliant Violet 650™ and unconjugated antibody.

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

Concentration: Lot-specific



Th17-polarized C57BL/6 mouse CD4+ lymphocytes were stimulated with PMA + Ionomycin for 6 hours (in the presence of monensin), stained with CD4 FITC, fixed, permeabilized, and then stained with IL-17A (clone TC11-18H10.1) Brilliant Violet 650™.

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

Brilliant Violet 650™ excites at 405 nm and emits at 645 nm. The bandpass filter 660/20 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 650™ is a trademark of Sirigen Group Ltd.

This product is subject to proprietary rights of Sirigen Inc. and is made and sold under license from Sirigen Inc. The purchase of this product conveys to the buyer a non-transferable right to use the purchased product for research purposes only. This product may not be resold or incorporated in any manner into another product for resale. Any use for therapeutics or diagnostics is strictly prohibited. This product is covered by U.S. Patent(s), pending patent applications and foreign equivalents.

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™ 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, 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-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,