SONY

Product Data Sheet

Brilliant Violet 785™ anti-mouse TCR β chain

Catalog # / Size: 1146245 / 50 µg

Clone: H57-597

Isotype: Hamster IgG

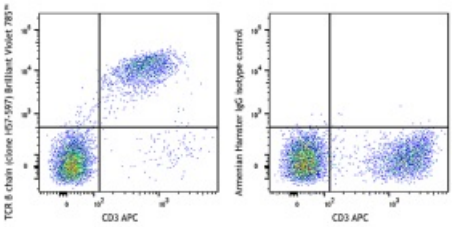
Immunogen: Affinity purified TCR from mouse DO-11.10 cells

Reactivity: Mouse

Preparation: The antibody was purified by affinity chromatography and conjugated with Brilliant Violet 785™ under optimal conditions. The solution is free of unconjugated Brilliant Violet 785™ and unconjugated antibody.

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

Concentration: 0.2 mg/ml



C57BL/6 splenocytes were stained with CD3 APC and anti-mouse TCR β chain (clone H57-597) Brilliant Violet 785™ (left) or armenian hamster IgG isotype control (right).

Applications:

Applications: Flow Cytometry

Recommended Usage: Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For flow cytometric staining, the suggested use of this reagent is ≤ 0.25 µg per million cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.

Brilliant Violet 785™ excites at 405 nm and emits at 785 nm. The bandpass filter 780/60 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 785™ is a trademark of Sirigen Group Ltd.

Application Notes: H57-597 is a hamster mAb directed to an epitope of the C region of TCR β chain[12]. The H57-597 antibody does not cross-react with γ/δ TCR-bearing T cells. Immobilized or soluble H57-597 antibody can activate α/β TCR-bearing T cells. Additional reported applications (for the relevant formats) for this antibody include: immunoprecipitation[2], *in vitro* stimulation[2,3], *in vivo* depletion[4-6], and immunohistochemical staining of acetone-fixed frozen sections[7,8,9].

Application References:

1. Gascoigne NJ. 1990. *J. Biol. Chem.* 265:9296.
2. Kruisbeek A, *et al.* 1991. *In Current Protocols in Immunology.* pp. 3.12.1. (Costim IP)
3. Davenport C, *et al.* 1995. *J. Immunol.* 155:3742. (Costim)
4. Drobyski W, *et al.* 1996. *Blood* 87:5355. (Deplete)
5. Kummer U, *et al.* 2001. *Immunol. Lett.* 75:153. (Deplete)
6. van der Heyde HC, *et al.* 1995. *J. Immunol.* 154:3985. (Deplete)
7. Tomita K, *et al.* 1999. *Genes Dev.* 13:1203. (IHC)
8. Podd BS, *et al.* 2006. *J. Immunol.* 176:6532. (IHC)
9. Ponomarev ED, *et al.* 2007. *J. Immunol.* 178:39. (IHC)
10. Chappaz S, *et al.* 2007. *Blood* doi:10.1182/blood-2007-02-074245. (FC) PubMed
11. Tsukumo S, *et al.* 2006. *J.Immunol.* 177:8365. (FC) PubMed
12. GrTgoire C, *et al.* 1991. *Proc. Natl. Acad. Sci USA* 88:8077.

Description: T cell receptor (TCR) is a heterodimer consisting of an α and a β chain (TCR α/β) or a γ and a δ chain (TCR γ/δ). TCR-β is a member of the immunoglobulin superfamily and a component of the CD3/TCR complex (along with TCR-α). It is expressed on α/β TCR-bearing T cells and thymocytes. The CD3/TCR complex plays a key role in antigen recognition, signal transduction, and T cell activation.

Antigen References:

1. Davis MM, *et al.* 1998. *Ann. Rev. Immunol.* 16:523.
2. Huppa JB, *et al.* 2003. *Nat. Immunol.* 4:749.
3. Kubo R, *et al.* 1989. *J. Immunol.* 142:2736.