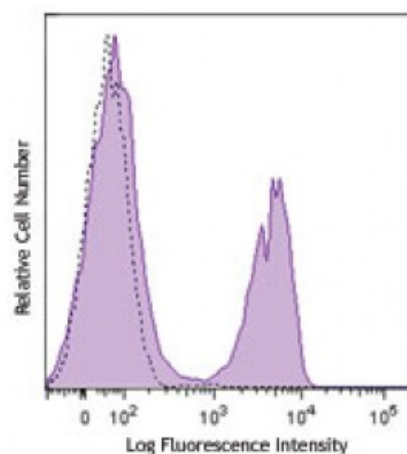


Brilliant Violet 570™ anti-mouse TCR β chain

Catalog # / Size:	1146155 / 125 μl
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 570™ under optimal conditions. The solution is free of unconjugated Brilliant Violet 570™ and unconjugated antibody.
Formulation:	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA).
Concentration:	Lot-specific



C57BL/6 mouse splenocytes were stained with TCR β (clone H57-597) Brilliant Violet 570™ (filled histogram) or Armenian hamster IgG Brilliant Violet 570™ isotype control (open histogram).

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 ≤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 570™ excites at 405 nm and emits at 570 nm. The bandpass filter 585/42 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 570™ 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: H57-597 is a hamster mAb directed to an epitope of the C region of TCR β chain¹². 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: immunoprecipitation², *in vitro* stimulation^{2,3}, *in vivo* depletion⁴⁻⁶, and immunohistochemical staining of acetone-fixed frozen sections^{7,8,9}. The LEAF™ purified antibody (Endotoxin <0.1 EU/μg, Azide-Free, 0.2 μm filtered) is recommended for functional assays (Cat. No. 109214).

Application 1. Gascoigne NJ. 1990. *J. Biol. Chem.* 265:9296.

- References:**
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 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. Grégoire C, *et al.* 1991. *Proc. Natl. Acad. Sci USA* 88:8077.
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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.