Brilliant Violet 605™ anti-human TCR Vβ13.1 Antibody

Catalog# / Size	362417 / 25 tests
Clone	H131
Regulatory Status	RUO
Other Names	T cell receptor Vβ13.1 chain, TCRBV13.1, TCRBV13
Isotype	Mouse IgG2b, κ
Description	TCR Vβ13.1 is a variant of the TCR β chain. The receptor is complexed with the TCR α chain and belongs to the immunoglobulin superfamily. It is expressed on a subset of T cells and some T cell clones. Variability in the β chain is generated by Vβ, Dβ, and Jβ gene rearrangement, while variability in the α chain is generated by Vα and Jα rearrangement. TCR Vβ13.1 has been shown to be related to antigen recognition and inflammation as well as diseases, such as HIV and multiple sclerosis.

Product Details

Verified Reactivity	Human
Antibody Type	Monoclonal
Host Species	Mouse
Immunogen	Mouse T cell hybridoma
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA)
Preparation	The antibody was purified by affinity chromatography and conjugated with Brilliant Violet 605™ under optimal conditions.
Concentration	Lot-specific (to obtain lot-specific concentration and expiration, please enter the lot number in our Certificate of Analysis online tool.)
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. **Do not freeze**.
Application	FC - Quality tested
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 µL per million cells in 100 µL staining volume 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. Learn more about Brilliant Violet™. 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.
Excitation Laser	Violet Laser (405 nm)
Application Notes	Additional reported applications (for the relevant formats of this clone) include: activation of TCR

Vß13.1 expressing cells[1].

Application References

(PubMed link indicates BioLegend citation)

1. Choi YW, *et al.* 1991. *Proc. Natl. Acad. Sci.* USA 88:8357.

Antigen Details

Structure	Immunoglobulin superfamily
Distribution	Subset of T cells
Function	Antigen recognition, activation of TCR Vβ13.1 bearing T cells
Ligand/Receptor	Peptide bound MHC molecules
Cell Type	T cells
Biology Area	Adaptive Immunity, Immunology
Molecular Family	TCRs
Antigen References	1. Hong J, *et al.* 1999. *J. Immunol.* 163:3530. 2. Jason J, *et al.* 1997. *Scand. J. Immunol.* 45:81. 3. Chang JC, *et al.* 1995. *Ann. NY. Acad. Sci.* 756:370. 4. Miyahara E, *et al.* 1999. *Anticancer Res.* 19:2057. 5. Usuku K, *et al.* 1993. *Immunogenetics.* 38:193. 6. Bakakos P, *et al.* 2002. *Clin. Exp. Immunol.* 129:370.
Gene ID	6957

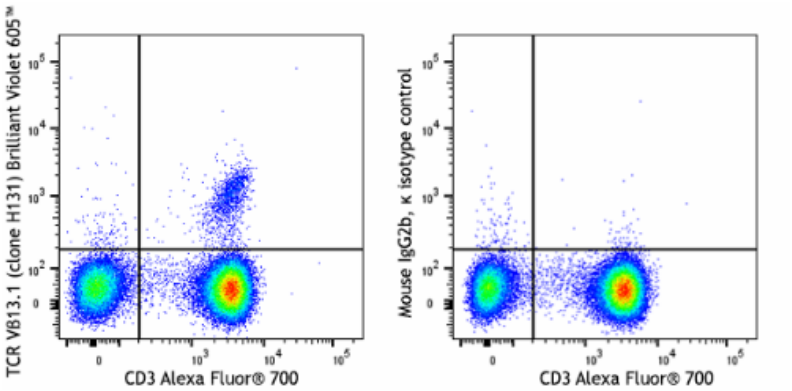
Related Protocols

- Cell Surface Flow Cytometry Staining Protocol

Other Formats

Purified anti-human TCR Vβ13.1, FITC anti-human TCR Vβ13.1, PE/Cyanine7 anti-human TCR Vβ13.1, APC anti-human TCR Vβ13.1, PE anti-human TCR Vβ13.1, TotalSeq™-C0908 anti-human TCR Vβ13.1, TotalSeq™-A0908 anti-human TCR Vβ13.1, TotalSeq™-B0908 anti-human TCR Vβ13.1 Antibody, Brilliant Violet 605™ anti-human TCR Vβ13.1 Antibody

Product Data



Human peripheral blood lymphocytes were stained with anti-human CD3 (clone UCHT1) Alexa Fluor® 700 and anti-human TCR Vβ13.1 (clone H131) Brilliant Violet 605™ (left) or mouse IgG2b, κ Brilliant Violet 605™ isotype control (right).

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