

Spark Violet™ 538 anti-human TCR Cβ1 Antibody

Catalog# / Size	383513 / 25 tests 383514 / 100 tests
Clone	JOVI.1
Regulatory Status	RUO
Other Names	T cell receptor beta constant 1, TRBC1
Isotype	Mouse IgG2a, κ
Description	The T cell receptor beta chain constant region-1 (TCR Cβ1), also known as TRBC1, is a segment of the TCR beta chain that forms the constant region of the T cell receptor. The rearrangement of TCR genes during T cell development leads to the selection of one of two TCR beta constant regions – C1 or C2. Detection of TRBC1 within a comprehensive T cell panel can be used as evidence of clonality akin to the use of kappa/lambda light chain detection in the diagnosis of plasma cell malignancies.

Product Details

Verified Reactivity	Human
Antibody Type	Monoclonal
Host Species	Mouse
Immunogen	Transgenic mouse lymphocytes expressing human Vβ3-Cβ1 TCR
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 Spark Violet™ 538 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. * Spark Violet™ 538 has a maximum excitation of 396 nm and a maximum emission of 538 nm.
Excitation Laser	Violet Laser (405 nm)
Application Notes	Clone JOVI.1 can interfere with the binding of clone IP26 on target cells.
Application References	1. Viney, J L <i>et al.</i> 1992. <i>Hybridoma</i> . 11:701-13. 2. Horna, Pedro <i>et al.</i> 2021. <i>Int J Mol Sci</i> . 22:1817.
(PubMed link indicates BioLegend citation)	
RRID	AB_3699029 (BioLegend Cat. No. 383513) AB_3699029 (BioLegend Cat. No. 383514)

Antigen Details

Structure	Predicted 20 kD Ig-like protein
Distribution	T lymphocytes
Cell Type	Leukemia, Lymphocytes, T cells, Thymocytes
Biology Area	Cancer Biomarkers, Cell Biology, Immunology
Molecular Family	TCRs

Antigen References

1. Minden, M D and T W Mak. 1986. *Blood*. 68:327-36.
2. Davis, M M *et al.* 1997. *Ciba Found Symp.* 204:94-100.
3. Maciocia, Paul M *et al.* 2017. *Nat Med.* 23:1416-23.

Gene ID [28639](#)

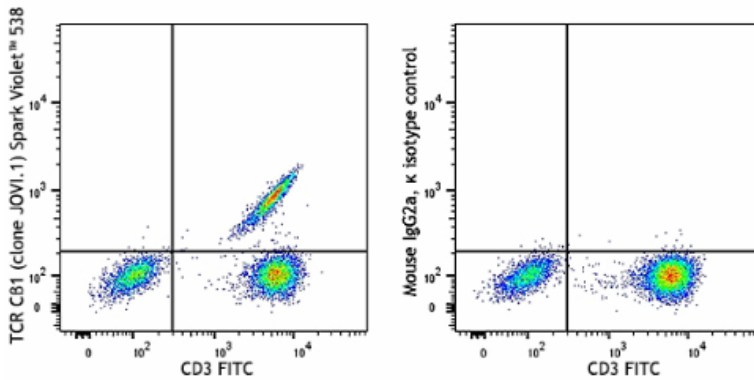
Related Protocols

- [Cell Surface Flow Cytometry Staining Protocol](#)

Other Formats

Purified anti-human TCR Cβ1, APC anti-human TCR Cβ1, PE anti-human TCR Cβ1, PerCP/Cyanine5.5 anti-human TCR Cβ1, FITC anti-human TCR Cβ1, Biotin anti-human TCR Cβ1, Spark Blue™ 550 anti-human TCR Cβ1 (Flexi-Fluor™), Spark Blue™ 574 anti-human TCR Cβ1 (Flexi-Fluor™), Spark Violet™ 538 anti-human TCR Cβ1 Antibody, PE/Cyanine7 anti-human TCR Cβ1 Antibody, Pacific Blue™ anti-human TCR Cβ1 Antibody, APC/Fire™ 750 anti-human TCR Cβ1 Antibody, Spark Red™ 718 anti-human TCR Cβ1 Antibody, PE/Dazzle™ 594 anti-human TCR Cβ1 Antibody

Product Data



Human peripheral blood lymphocytes were stained with anti-human CD3 (clone UCHT1) FITC and anti-human TCR Cβ1 (clone JOVI.1) Spark Violet™ 538 (left) or mouse IgG2a, κ Spark Violet™ 538 isotype control (right).

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