

Pacific Blue™ anti-human TCR Cβ1 Antibody

Catalog# / Size	383517 / 25 tests 383518 / 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 Pacific Blue™ 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. * Pacific Blue™ has a maximum emission of 455 nm when it is excited at 405 nm. Prior to using Pacific Blue™ conjugate for flow cytometric analysis, please verify your flow cytometer's capability of exciting and detecting the fluorochrome. Alexa Fluor® and Pacific Blue™ are trademarks of Life Technologies Corporation. View full statement regarding label licenses
Excitation Laser	Violet Laser (405 nm)
Application Notes	Clone JOVI.1 can interfere with the binding of clone IP26 on target cells.
Application References (PubMed link indicates BioLegend citation)	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.

RRID AB_3699031 (BioLegend Cat. No. 383517)
AB_3699031 (BioLegend Cat. No. 383518)

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](#)

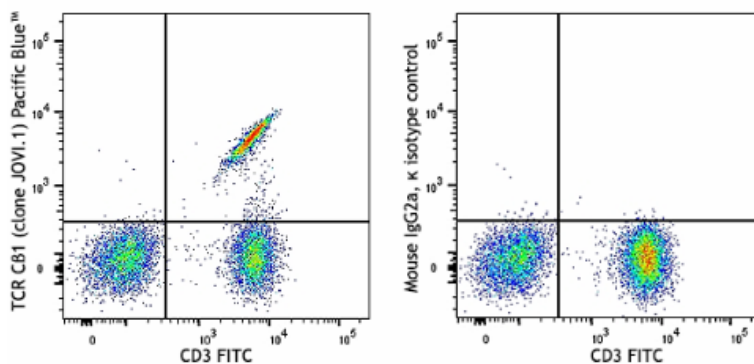
Related Protocols

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

Other Formats

Purified anti-human TCR C β 1, APC anti-human TCR C β 1, PE anti-human TCR C β 1, PerCP/Cyanine5.5 anti-human TCR C β 1, FITC anti-human TCR C β 1, Biotin anti-human TCR C β 1, Spark Blue™ 550 anti-human TCR C β 1 (Flexi-Fluor™), Spark Blue™ 574 anti-human TCR C β 1 (Flexi-Fluor™), Spark Violet™ 538 anti-human TCR C β 1 Antibody, PE/Cyanine7 anti-human TCR C β 1 Antibody, Pacific Blue™ anti-human TCR C β 1 Antibody, APC/Fire™ 750 anti-human TCR C β 1 Antibody, Spark Red™ 718 anti-human TCR C β 1 Antibody, PE/Dazzle™ 594 anti-human TCR C β 1 Antibody

Product Data



Human peripheral blood lymphocytes were stained with anti-human CD3 (clone UCHT1) FITC and anti-human TCR C β 1 (clone JOVI.1) Pacific Blue™ (left) or mouse IgG2a, κ Pacific Blue™ isotype control (right).

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