

APC/Fire™ 810 anti-human TCR Cβ1 Antibody

Catalog# / Size	383527 / 25 tests 383528 / 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 APC/Fire™ 810 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. * APC/Fire™ 810 has a maximum excitation of 650 nm and a maximum emission of 810 nm. Excessive exposure to light, and commonly used fixation, permeabilization buffers can affect APC/Fire™ 810 fluorescence signal intensity and spread. Please keep conjugates protected from light exposure. For more information and representative data, visit our Fire Dyes page.
Excitation Laser	Red Laser (633 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)	

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](#)

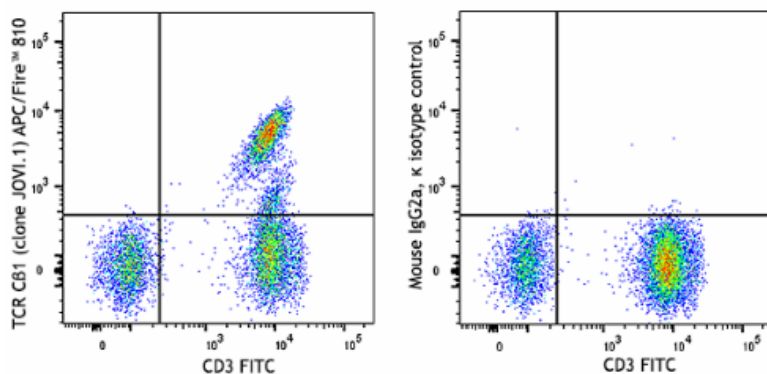
Related Protocols

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

Other Formats

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, Purified anti-human TCR C β 1, Biotin anti-human TCR C β 1, Spark Violet™ 538 anti-human TCR C β 1 Antibody, Spark Blue™ 550 anti-human TCR C β 1 (Flexi-Fluor™), Spark Blue™ 574 anti-human TCR C β 1 (Flexi-Fluor™), PE/Dazzle™ 594 anti-human TCR C β 1 Antibody, PerCP/Fire™ 806 anti-human TCR C β 1 Antibody, APC/Fire™ 810 anti-human TCR C β 1 Antibody, Spark PLUS UV395™ anti-human TCR C β 1 (Flexi-Fluor™), Spark Red™ 718 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

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) APC/Fire™ 810 (left) or mouse IgG2a, κ APC/Fire™ 810 isotype control (right).

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