

Alexa Fluor® 660 anti-human TCR γ/δ Antibody

Catalog# / Size	331239 / 25 tests 331240 / 100 tests
Clone	B1
Regulatory Status	RUO
Other Names	T cell receptor γ/δ , γ/δ TCR, TCR- γ/δ
Isotype	Mouse IgG1, κ
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 γ/δ is involved in the recognition of certain bacterial, self-CD1 molecule, and tumor antigens bound to MHC class I. The γ/δ TCR associates with CD3 and is expressed on a subset of T cells found in the thymus, the intestinal epithelium, and the peripheral lymphoid tissues and peritoneum. Most γ/δ T cells are CD4 ⁻ /CD8 ⁻ , some are CD8 ⁺ . T cells expressing the γ/δ TCR have been shown to play a role in oral tolerance, innate immune response for some tumor cells, and autoimmune disease. It has been reported that γ/δ T cells also play a principal role in antigen presentation.

Product Details

Verified Reactivity	Human, Cynomolgus, Rhesus
Reported Reactivity	African Green, Baboon, Pigtailed Macaque
Antibody Type	Monoclonal
Host Species	Mouse
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 Alexa Fluor® 660 under optimal conditions.
Concentration	Lot-specific (to obtain lot-specific concentration, please enter the lot number in our Concentration and Expiration Lookup or Certificate of Analysis online tools.)
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 μ L per million cells in 100 μ L staining volume or 5 μ L per 100 μ L of whole blood. It is recommended that the reagent be titrated for optimal performance for each application. * Alexa Fluor® 660 has an excitation maximum of 663 nm, and a maximum emission of 690 nm. Alexa Fluor® and Pacific Blue™ are trademarks of Life Technologies Corporation. View full statement regarding label licenses
Excitation Laser	Red Laser (633 nm)
Application Notes	Clone B1 is also known as clone B1.1. Additional reported applications (for the relevant formats) include: immunohistochemical staining of acetone-fixed frozen sections ³ and paraffin-embedded sections ⁵ , <i>in vitro</i> blocking, and spatial biology (IBEX) ^{8,9} . The Ultra-LEAF™ purified antibody (Endotoxin < 0.01 EU/ μ g, Azide-Free, 0.2 μ m filtered) is recommended for highly sensitive assays (Cat. Nos. 331235 and 331236).
Application References	1. Rodriguez-Gago M, <i>et al.</i> 2001. <i>Transplantation</i> . 72:503. 2. Lehmann FS, <i>et al.</i> 2002. <i>Am. J. Physiol. Gastrointest. Liver. Physiol.</i> 283:G481. (FC)
(PubMed link indicates	

BioLegend citation) 3. Bordignon M, *et al.* 2008. *Mol. Med. Rep.* 1:485. (IHC)
4. Conrad M, *et al.* 2007. *Cytom. Part A* 71A:925. (FC)
5. Pollinger B, *et al.* 2011. *J. Immunol.* 186:2602. (IHC)
6. Correia DV, *et al.* 2011. *Blood.* 118:992. (Block)
7. Laurent AJ, *et al.* 2014. *PLoS One.* 9:103683. [PubMed](#)
8. Radtke AJ, *et al.* 2020. *Proc Natl Acad Sci USA.* 117:33455-33465. (SB) [PubMed](#)
9. Radtke AJ, *et al.* 2022. *Nat Protoc.* 17:378-401. (SB) [PubMed](#)

RRID AB_2892398 (BioLegend Cat. No. 331239)
AB_2892398 (BioLegend Cat. No. 331240)

Antigen Details

Structure Ig superfamily, associates with CD3 complex

Distribution T subset in thymus, intestinal epithelium, peripheral lymphoid tissues and peritoneum

Function Antigen recognition

Ligand/Receptor Some bacterial or tumor antigens bound MHC class I, CD1 molecule

Cell Type Epithelial cells, T cells

Biology Area Adaptive Immunity, Immunology

Molecular Family TCRs

Antigen References 1. Lanier LL, *et al.* 1987. *J. Clin. Immunol.* 7:429.
2. Spencer J, *et al.* 1989. *Eur. J. Immunol.* 19:1335.
3. Uyemura K, *et al.* 1991. *J. Exp. Med.* 174:683.
4. Spada FM, *et al.* 2000. *J. Exp. Med.* 191:907.

Gene ID [6964](#)
[6965](#)

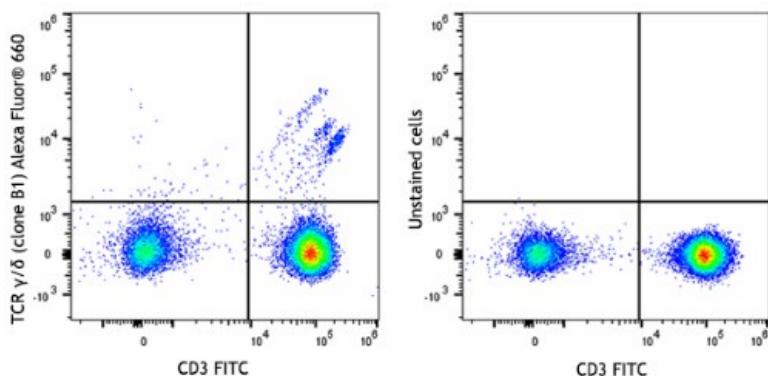
Related Protocols

[Cell Surface Flow Cytometry Staining Protocol](#)

Other Formats

Purified anti-human TCR γ/δ , Biotin anti-human TCR γ/δ , FITC anti-human TCR γ/δ , PE anti-human TCR γ/δ , APC anti-human TCR γ/δ , Alexa Fluor® 647 anti-human TCR γ/δ , Brilliant Violet 421™ anti-human TCR γ/δ , Brilliant Violet 510™ anti-human TCR γ/δ , PE/Cyanine7 anti-human TCR γ/δ , PerCP/Cyanine5.5 anti-human TCR γ/δ , PE/Dazzle™ 594 anti-human TCR γ/δ , APC/Fire™ 750 anti-human TCR γ/δ , TotalSeq™-A0139 anti-human TCR γ/δ , TotalSeq™-C0139 anti-human TCR γ/δ , TotalSeq™-B0139 anti-human TCR γ/δ , Ultra-LEAF™ Purified anti-human TCR γ/δ , PE/Fire™ 700 anti-human TCR γ/δ Antibody, Alexa Fluor® 660 anti-human TCR γ/δ Antibody, TotalSeq™-D0139 anti-human TCR γ/δ

Product Data



Human peripheral blood lymphocytes were stained with CD3 FITC and TCR γ/δ (clone B1) Alexa Fluor® 660 (left) or CD3 FITC only (right).

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