

PE anti-mouse TCR V γ 4 Antibody

Catalog# / Size	160603 / 25 μ g 160604 / 100 μ g
Clone	49.2
Regulatory Status	RUO
Other Names	T Cell Receptor V γ 4, TCR V γ 2, TRGV4, GV3S1
Isotype	Mouse IgG1, κ
Description	<p>T cell receptor (TCR) is a heterodimer consisting of an α and β chain (TCR α/β) or a γ and δ chain (TCR γ/δ). TCR associates with CD3 to form a CD3/TCR complex. The CD3/TCR plays a key role in antigen recognition, signal transduction, and T cell activation. $\gamma\delta$ T cells (gamma delta T cells) are a small subset of T cells that express a unique TCR. They are found in the thymus, peripheral lymphoid tissue, and peritoneum. Unlike $\alpha\beta$ T cells, $\gamma\delta$ T cells do not require antigen processing in order to recognize certain bacterial, lipid, and tumor antigens.</p> <p>The 49.2 antibody reacts specifically with mouse TCR Vγ4 as designated by Heilig/Tonegawa nomenclature.² Mouse TCR Vγ4 is also known as TCR Vγ2 under the Garman nomenclature system. Several TCR γ and δ chain nomenclature systems exist.</p> <p>In order to consolidate the various nomenclature systems, we have created charts for corresponding names across some of the most popular naming methods. Click here to see charts.</p>

Product Details

Verified Reactivity	Mouse
Antibody Type	Monoclonal
Host Species	Mouse
Immunogen	C57BL/6 thymocytes expanded in vitro in anti-TCR $\gamma\delta$ antibody coated plates
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide
Preparation	The antibody was purified by affinity chromatography and conjugated with PE under optimal conditions.
Concentration	0.2 mg/mL
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 ≤ 0.5 μ g per million cells in 100 μ L volume. It is recommended that the reagent be titrated for optimal performance for each application.
Excitation Laser	Blue Laser (488 nm) Green Laser (532 nm)/Yellow-Green Laser (561 nm)
Application References	1. Khairallah C, <i>et al.</i> 2015. <i>PLoS Pathog.</i> 11:e1004702. 2. Pereira P, <i>et al.</i> 2000. <i>Eur J Immunol.</i> 30:1988-97.
(PubMed link indicates BioLegend citation)	
RRID	AB_3675011 (BioLegend Cat. No. 160603)

Antigen Details

Structure	Heterodimer with γ and δ chain
Distribution	Subset of $\gamma\delta$ T cells
Function	Antigen recognition
Interaction	CD3
Cell Type	Lymphocytes, T cells, Thymocytes
Biology Area	Adaptive Immunity, Immunology, Innate Immunity
Molecular Family	TCRs
Gene ID	21638

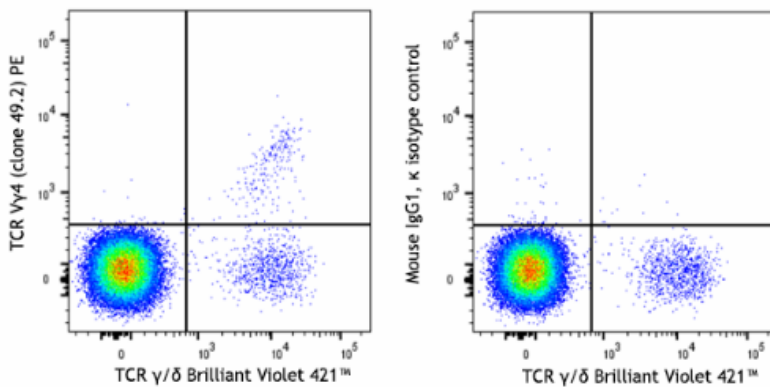
Related Protocols

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

Other Formats

Purified anti-mouse TCR V γ 4, PE anti-mouse TCR V γ 4, FITC anti-mouse TCR V γ 4, APC anti-mouse TCR V γ 4

Product Data



C57BL/6 mouse splenocytes were stained with anti-mouse CD3 (clone 17A2) APC, anti-mouse TCR γ/δ (clone GL3) Brilliant Violet 421™, and anti-mouse TCR V γ 4 (clone 49.2) PE (left) or mouse IgG1, κ PE isotype control (right). Data shown are CD3⁺ gated cells.

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