

Brilliant Violet 421™ anti-mouse CD3ε Recombinant Antibody

Catalog# / Size	155715 / 50 µg
Clone	QA17A05
Regulatory Status	RUO
Other Names	CD3ε, T3, CD3
Isotype	Mouse IgG1, κ
Description	CD3ε is a 20 kD transmembrane protein, also known as CD3 or T3. It is a member of the Ig superfamily and primarily expressed on T cells, NK-T cells, and at different levels on thymocytes during T cell differentiation. CD3ε forms a TCR complex by associating with the CD3δ, γ and ζ chains, as well as the TCR α/β or γ/δ chains. CD3 plays a critical role in TCR signal transduction, T cell activation, and antigen recognition by binding the peptide/MHC antigen complex.

Product Details

Verified Reactivity	Mouse
Antibody Type	Recombinant
Host Species	Mouse
Immunogen	H-2Kb-specific mouse cytotoxic T lymphocyte clone BM10-37
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 Brilliant Violet 421™ 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 µg per million cells in 100 µL volume. It is recommended that the reagent be titrated for optimal performance for each application. Brilliant Violet 421™ excites at 405 nm and emits at 421 nm. The standard bandpass filter 450/50 nm is recommended for detection. Brilliant Violet 421™ is a trademark of Sirigen Group Ltd. Learn more about Brilliant Violet™. This product is subject to proprietary rights of Sirigen Inc. and is made and sold under license from Sirigen Inc. The purchase of this product conveys to the buyer a non-transferable right to use the purchased product for research purposes only. This product may not be resold or incorporated in any manner into another product for resale. Any use for therapeutics or diagnostics is strictly prohibited. This product is covered by U.S. Patent(s), pending patent applications and foreign equivalents.
Excitation Laser	Violet Laser (405 nm)
Application Notes	Clone QA17A05 blocks clone 145-2C11. It also activates T cell proliferation like clone 145-2C11.
RRID	AB_3716909 (BioLegend Cat. No. 155715)

Antigen Details

Structure	Ig superfamily, forms CD3/TCR complex with CD3 δ , γ and ζ subunits and TCR (α/β and γ/δ), 20 kD
Distribution	Thymocytes (differentiation dependent), mature T cells, NK-T cells
Function	TCR signal transduction, T cell activation, antigen recognition
Ligand/Receptor	Peptide antigen/MHC-complex
Cell Type	NKT cells, T cells, Thymocytes
Biology Area	Immunology
Molecular Family	CD Molecules, TCRs
Antigen References	1. Barclay AN, Brown MH. 1997. <i>Biochem. Soc. Trans.</i> 25:224-8. 2. Davis MM. 1990. <i>Annu. Rev. Biochem.</i> 59:475. 3. Weiss A, Littman DR. 1994. <i>Cell.</i> 76:263.
Gene ID	12501

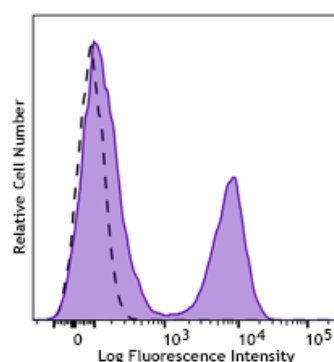
Related Protocols

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

Other Formats

Brilliant Violet 510™ anti-mouse CD3 ϵ Recombinant Antibody, Brilliant Violet 421™ anti-mouse CD3 ϵ Recombinant Antibody, PE/Fire™ 810 anti-mouse CD3 ϵ Recombinant Antibody, Purified anti-mouse CD3 ϵ Recombinant Antibody, Brilliant Violet 605™ anti-mouse CD3 ϵ Recombinant Antibody, PerCP/Fire™ 806 anti-mouse CD3 ϵ Recombinant Antibody, PE anti-mouse CD3 ϵ Recombinant Antibody, PerCP/Cyanine5.5 anti-mouse CD3 ϵ Recombinant Antibody, PE/Cyanine7 anti-mouse CD3 ϵ Recombinant Antibody, APC/Cyanine7 anti-mouse CD3 ϵ Recombinant Antibody

Product Data



C57BL/6 mouse splenocytes were incubated with TruStain FcX™ (clone 93) and then stained with anti-mouse CD3 ϵ recombinant (clone QA17A05) Brilliant Violet 421™ (filled histogram) or mouse IgG1, κ Brilliant Violet 421™ isotype control (open histogram).

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8999 BioLegend Way, San Diego, CA 92121 www.biolegend.com
Toll-Free Phone: 1-877-Bio-Legend (246-5343) Phone: (858) 768-5800 Fax: (877) 455-9587