

APC/Cyanine7 anti-mouse CD3 Antibody

Catalog# / Size	100221 / 25 µg 100222 / 100 µg
Clone	17A2
Regulatory Status	RUO
Other Names	T cell antigen receptor complex, T3
Isotype	Rat IgG2b, κ
Description	CD3, also known as T3, 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. CD3 is composed of CD3ε, δ, γ and ζ chains. It forms a TCR complex by associating with 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	Monoclonal
Host Species	Rat
Immunogen	γδTCR-positive T-T hybridoma D1
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.
Preparation	The antibody was purified by affinity chromatography, and conjugated with APC/Cyanine7 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 =0.25 µg per million cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.
Excitation Laser	Red Laser (633 nm)
Application Notes	Additional reported application (for relevant formats) include: spatial biology (IBEX) ^{1,2} .
Additional Product Notes	BioLegend is in the process of converting the name APC/Cy7 to APC/Cyanine7. The dye molecule remains the same, so you should expect the same quality and performance from our APC/Cyanine7 products. Please contact Technical Service if you have any questions.
Application References	<ol style="list-style-type: none"> 1. Radtke AJ, <i>et al.</i> 2020. <i>Proc Natl Acad Sci U S A.</i> 117:33455-65. (SB) PubMed 2. Radtke AJ, <i>et al.</i> 2022. <i>Nat Protoc.</i> 17:378-401. (SB) PubMed
(PubMed link indicates BioLegend citation)	
Product Citations	<ol style="list-style-type: none"> 1. Mackel JJ, <i>et al.</i> 2022. <i>Front Cell Infect Microbiol.</i> 12:974175. PubMed 2. Chung Y, <i>et al.</i> 2014. <i>J Vis Exp.</i> 89: 51660. PubMed 3. Sun L, <i>et al.</i> 2021. <i>Cancer Cell.</i> .: PubMed 4. Ferrere G, <i>et al.</i> 2021. <i>JCI Insight.</i> 6.: PubMed 5. Shimizu K, <i>et al.</i> 2020. <i>Molecular Cell.</i> 77(5):937-950.e6.. PubMed 6. Viny AD, <i>et al.</i> 2019. <i>Cell Stem Cell.</i> 25:682. PubMed 7. Alissafi T, <i>et al.</i> 2018. <i>J Clin Invest.</i> 128:3840. PubMed 8. Israelow B, <i>et al.</i> 2020. <i>bioRxiv.</i> . PubMed

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RRID AB_2057374 (BioLegend Cat. No. 100221)
 AB_2242784 (BioLegend Cat. No. 100222)

Antigen Details

Structure	Ig superfamily, CD3/TCR, 20 kD
Distribution	Thymocytes (differentiation dependent), mature T cells, NK-T cells
Function	Antigen recognition, TCR signal transduction, T cell activation
Ligand/Receptor	Peptide antigen/MHC-complex
Antigen References	1. Barclay A, <i>et al.</i> 1997. The Leukocyte Antigen FactsBook Academic Press. 2. Davis MM. 1990. <i>Annu. Rev. Biochem.</i> 59:475. 3. Weiss A, <i>et al.</i> 1994. <i>Cell</i> 76:263.
Gene ID	12502

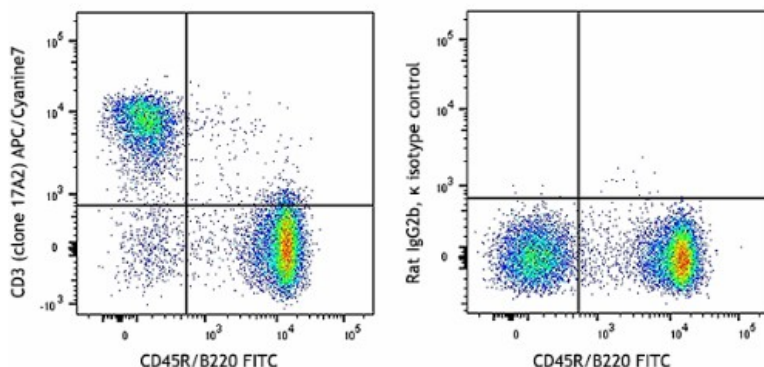
Related Protocols

[Cell Surface Flow Cytometry Staining Protocol](#)

Other Formats

FITC anti-mouse CD3, PE anti-mouse CD3, Purified anti-mouse CD3, Alexa Fluor® 647 anti-mouse CD3, Alexa Fluor® 488 anti-mouse CD3, Pacific Blue™ anti-mouse CD3, Alexa Fluor® 700 anti-mouse CD3, PerCP/Cyanine5.5 anti-mouse CD3, PE/Cyanine7 anti-mouse CD3, APC/Cyanine7 anti-mouse CD3, Brilliant Violet 421™ anti-mouse CD3, Brilliant Violet 570™ anti-mouse CD3, Brilliant Violet 650™ anti-mouse CD3, Brilliant Violet 785™ anti-mouse CD3, Brilliant Violet 510™ anti-mouse CD3, APC anti-mouse CD3, Ultra-LEAF™ Purified anti-mouse CD3, Brilliant Violet 605™ anti-mouse CD3, Alexa Fluor® 594 anti-mouse CD3, Brilliant Violet 711™ anti-mouse CD3, Biotin anti-mouse CD3, PE/Dazzle™ 594 anti-mouse CD3, APC/Fire™ 750 anti-mouse CD3, Brilliant Violet 750™ anti-mouse CD3, TotalSeq™-A0182 anti-mouse CD3, TotalSeq™-B0182 anti-mouse CD3, Spark Blue™ 550 anti-mouse CD3, Spark NIR™ 685 anti-mouse CD3, TotalSeq™-C0182 anti-mouse CD3, APC/Fire™ 810 anti-mouse CD3, PE/Fire™ 640 anti-mouse CD3, Spark YG™ 570 anti-mouse CD3, PE/Fire™ 700 anti-mouse CD3, PE/Cyanine5 anti-mouse CD3, Spark Blue™ 574 anti-mouse CD3 Antibody, Spark Violet™ 423 anti-mouse CD3, PE/Fire™ 810 anti-mouse CD3, Spark Red™ 718 anti-mouse CD3

Product Data



C57BL/6 splenocytes were stained with CD45R/B220 FITC and CD3 (clone 17A2) APC/Cyanine7 (left) or Rat IgG2b, κ APC/Cyanine7 isotype control (right).

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