

Spark PLUS B488™ anti-mouse CD3 Antibody

Catalog# / Size	100291 / 25 µg 100292 / 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 Spark PLUS B488™ 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. * Spark PLUS B488™ has a maximum excitation of 499 nm and a maximum emission of 520 nm.
Excitation Laser	Blue Laser (488 nm)
Application Notes	Additional reported application (for relevant formats) include: spatial biology (IBEX) ^{1,2} .
Application References	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)	
RRID	AB_3720646 (BioLegend Cat. No. 100291) AB_3720646 (BioLegend Cat. No. 100292)

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

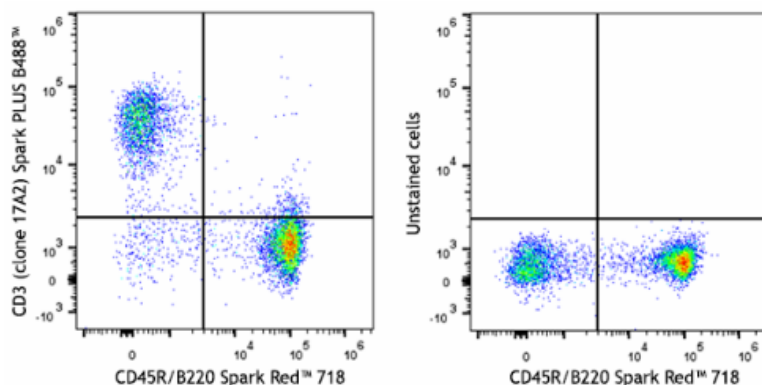
Related Protocols

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

Other Formats

PE/Cyanine5 anti-mouse CD3, Spark Violet™ 423 anti-mouse CD3, Spark Blue™ 574 anti-mouse CD3 Antibody, Spark UV™ 387 anti-mouse CD3, PE/Fire™ 810 anti-mouse CD3, Brilliant Violet 711™ anti-mouse CD3, Biotin anti-mouse CD3, APC/Fire™ 750 anti-mouse CD3, PE/Dazzle™ 594 anti-mouse CD3, Purified anti-mouse CD3, PE/Cyanine7 anti-mouse CD3, APC/Cyanine7 anti-mouse CD3, PE anti-mouse CD3, PerCP/Cyanine5.5 anti-mouse CD3, Brilliant Violet 570™ anti-mouse CD3, Brilliant Violet 650™ anti-mouse CD3, APC anti-mouse CD3, Ultra-LEAF™ Purified anti-mouse CD3, Spark Red™ 718 anti-mouse CD3, Brilliant Violet 421™ anti-mouse CD3, Alexa Fluor® 594 anti-mouse CD3, PerCP/Fire™ 780 anti-mouse CD3 Antibody, PerCP anti-mouse CD3 Antibody, Spark YG™ 581 anti-mouse CD3 (Flexi-Fluor™), Alexa Fluor® 647 anti-mouse CD3, Spark PLUS B488™ anti-mouse CD3, Alexa Fluor® 488 anti-mouse CD3, Alexa Fluor® 700 anti-mouse CD3, TotalSeq™-A0182 anti-mouse CD3, TotalSeq™-B0182 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, Brilliant Violet 605™ anti-mouse CD3, Spark YG™ 593 anti-mouse CD3 (Flexi-Fluor™) Antibody, Pacific Blue™ anti-mouse CD3, Spark NIR™ 685 anti-mouse CD3, TotalSeq™-C0182 anti-mouse CD3, Brilliant Violet 785™ anti-mouse CD3, Brilliant Violet 510™ anti-mouse CD3, FITC anti-mouse CD3, Brilliant Violet 750™ anti-mouse CD3, Spark Blue™ 550 anti-mouse CD3

Product Data



C57BL/6 mouse splenocytes were stained with anti-mouse/human CD45R/B220 (clone RA3-6B2) Spark Red™ 718 and anti-mouse CD3 (clone 17A2) Spark PLUS B488™ (left) or stained with anti-mouse/human CD45R/B220 (clone RA3-6B2) Spark Red™ 718 only (right).

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