

Spark PLUS B574™ anti-human CD25 Antibody

Catalog# / Size	356173 / 25 tests 356174 / 100 tests
Clone	M-A251
Regulatory Status	RUO
Workshop	IV A053
Other Names	IL-2 receptor α chain, Low affinity IL-2R, IL-2R α chain
Isotype	Mouse IgG1, κ
Description	CD25 is a 55 kD type I transmembrane glycoprotein also known as low affinity IL-2 receptor α chain or Tac. It is expressed on progenitor lymphocytes, activated T and B cells, and activated monocytes/macrophages. CD25 is also expressed on a subset of non-stimulated CD4 ⁺ T cells termed T regulatory cells. Soluble CD25/IL-2R α is produced as a consequence of lymphocyte stimulation and is found in biological fluids following inflammatory responses. CD25 associates with IL-2 receptor β (CD122) and common γ (CD132) chains to form a high affinity IL-2R complex.

Product Details

Verified Reactivity	Human
Reported Reactivity	Baboon, Cynomolgus, Rhesus
Antibody Type	Monoclonal
Host Species	Mouse
Immunogen	Human PHA-induced lymphocyte cells
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 Spark PLUS B574™ under optimal conditions.
Concentration	Lot-specific (to obtain lot-specific concentration and expiration, please enter the lot number in our Certificate of Analysis online tool).
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. * Spark PLUS B574™ has a maximum excitation of 506 nm and a maximum emission of 574 nm.
Excitation Laser	Blue Laser (488 nm)
Application Notes	Additional reported applications (for the relevant formats) include: immunohistochemical staining of paraformaldehyde fixed frozen sections ¹ and spatial biology (IBEX) ^{2,3} . The CD25 molecule reveals three epitope regions: A, B, and C. M-A251 antibody recognizes epitope region B. Unlike other CD25 antibody clones, M-A251 can detect CD25 after fixation with paraformaldehyde.

Application References

(PubMed link indicates
BioLegend citation)

1. Li H and Pauza CD. 2015. *Eur. J. Immunol.* 45:298. (IHC)
2. Radtke AJ, *et al.* 2020. *Proc Natl Acad Sci USA.* 117:33455-33465. (SB) [PubMed](#)
3. Radtke AJ, *et al.* 2022. *Nat Protoc.* 17:378-401. (SB) [PubMed](#)

RRID

AB_3717241 (BioLegend Cat. No. 356173)
AB_3717241 (BioLegend Cat. No. 356174)

Antigen Details

Structure	Type I transmembrane glycoprotein, 55 kD; low-affinity IL-2 receptor α chain
Distribution	Activated T and B cells, monocytes/macrophages, Tregs
Interaction	Associates with IL-2R β /CD122 and IL-2R γ /CD132 receptor chains to form a high-affinity IL-2R complex
Ligand/Receptor	IL-2
Cell Type	B cells, Macrophages, Monocytes, T cells, Tregs
Biology Area	Cell Biology, Immunology, Neuroscience, Neuroscience Cell Markers
Molecular Family	CD Molecules, Cytokine/Chemokine Receptors
Antigen References	1. Knapp W, <i>et al.</i> 1989. <i>Leucocyte Typing IV: White Cell Differentiation Antigens.</i> Oxford University Press. 2. Schlossman S, <i>et al.</i> 1995. <i>Leucocyte Typing V: White Cell Differentiation Antigens.</i> Oxford University Press. 3. Barclay N, <i>et al.</i> 1997. <i>The Leukocyte Antigen FactsBook.</i> Academic Press Inc. 4. Taniguchi T and Minami Y. <i>et al.</i> 1993. <i>Cell</i> 73:5. 5. Waldmann T. 1991. <i>J. Biol. Chem.</i> 266:2681.
Gene ID	3559

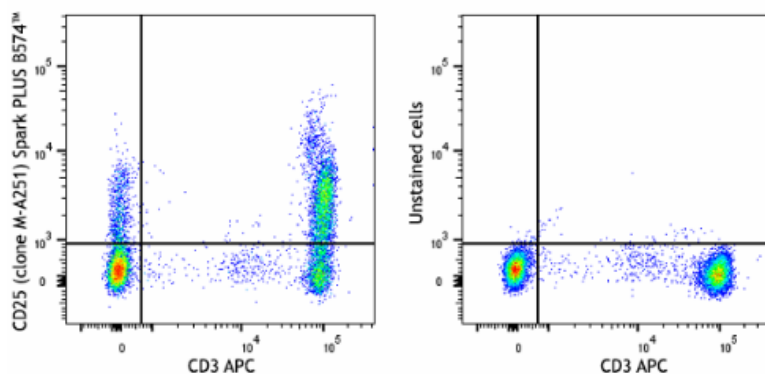
Related Protocols

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

Other Formats

Spark YG™ 581 anti-human CD25, PE/Fire™ 640 anti-human CD25 Antibody, PE anti-human CD25, PerCP/Cyanine5.5 anti-human CD25, APC/Fire™ 750 anti-human CD25, APC anti-human CD25, PE/Cyanine5 anti-human CD25, PE/Cyanine7 anti-human CD25, Spark Red™ 718 anti-human CD25, GMP PE anti-human CD25, GMP PE/Cyanine7 anti-human CD25, PerCP/Fire™ 806 anti-human CD25, Brilliant Violet 750™ anti-human CD25, Brilliant Violet 711™ anti-human CD25, FITC anti-human CD25, Purified anti-human CD25, Alexa Fluor® 647 anti-human CD25, PE/Dazzle™ 594 anti-human CD25, Pacific Blue™ anti-human CD25, PerCP anti-human CD25, PerCP/Fire™ 780 anti-human CD25, PE/Fire™ 744 anti-human CD25, Brilliant Violet 650™ anti-human CD25, GMP FITC anti-human CD25, TotalSeq™-B1552 anti-human CD25, TotalSeq™-C1552 anti-human CD25, KIRAVIA Blue 520™ anti-human CD25, APC/Cyanine7 anti-human CD25, Biotin anti-human CD25, Spark YG™ 593 anti-human CD25 (Flexi-Fluor™) Antibody, Brilliant Violet 605™ anti-human CD25, APC/Fire™ 810 anti-human CD25, Spark NIR™ 685 anti-human CD25 Antibody, Brilliant Violet 421™ anti-human CD25, Alexa Fluor® 488 anti-human CD25, Alexa Fluor® 700 anti-human CD25, Brilliant Violet 510™ anti-human CD25, StarBright UltraViolet 740 anti-human CD25, Spark PLUS B574™ anti-human CD25 Antibody, Brilliant Violet 785™ anti-human CD25, PE/Fire™ 700 anti-human CD25

Product Data



Human peripheral blood lymphocytes were stained with anti-human CD3 (clone UCHT1) APC and anti-human CD25 (clone M-A251) Spark PLUS B574™ (left) or stained with anti-human CD3 (clone UCHT1) APC only (right). Data shown are gated on the lymphocyte population.

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