

APC anti-human CD25 Antibody

Catalog# / Size	356109 / 25 tests 356110 / 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 APC under optimal conditions.
Concentration	Lot-specific (to obtain lot-specific concentration, please enter the lot number in our Concentration and Expiration Lookup or Certificate of Analysis online tools.)
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.
Excitation Laser	Red Laser (633 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	<ol style="list-style-type: none"> Li H and Pauza CD. 2015. <i>Eur. J. Immunol.</i> 45:298. (IHC) Radtke AJ, et al. 2020. <i>Proc Natl Acad Sci USA.</i> 117:33455-33465. (SB) PubMed Radtke AJ, et al. 2022. <i>Nat Protoc.</i> 17:378-401. (SB) PubMed
Product Citations	<ol style="list-style-type: none"> Kim CJ, et al. 2018. <i>Immunity.</i> 49:1034. PubMed

2. Porsche CE, *et al.* 2021. JCI Insight. 6:. [PubMed](#)
3. Zhang J, *et al.* 2022. Nature. 609:369. [PubMed](#)
4. Bradley D, *et al.* 2022. Nat Commun. 13:5606. [PubMed](#)
5. Pierce CA, *et al.* 2020. Sci Transl Med. 12:00. [PubMed](#)
6. Jin J, *et al.* 2014. PLoS One. 9:104753. [PubMed](#)
7. Zhai Y, *et al.* 2018. Autophagy. 1.714583333. [PubMed](#)

RRID AB_2561976 (BioLegend Cat. No. 356109)
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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	<ol style="list-style-type: none"> 1. Knapp W, <i>et al.</i> 1989. Leucocyte Typing IV: White Cell Differentiation Antigens. Oxford University Press. 2. Schlossman S, <i>et al.</i> 1995. Leucocyte Typing V: White Cell Differentiation Antigens. Oxford University Press. 3. Barclay N, <i>et al.</i> 1997. The Leukocyte Antigen FactsBook. 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

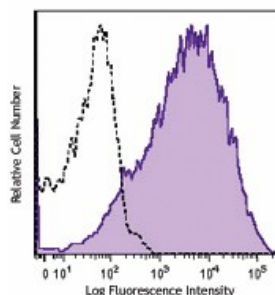
Related Protocols

[Cell Surface Flow Cytometry Staining Protocol](#)

Other Formats

APC/Cyanine7 anti-human CD25, Purified anti-human CD25, PE anti-human CD25, FITC anti-human CD25, PE/Cyanine7 anti-human CD25, APC anti-human CD25, PerCP/Cyanine5.5 anti-human CD25, Brilliant Violet 421™ anti-human CD25, Alexa Fluor® 488 anti-human CD25, Alexa Fluor® 700 anti-human CD25, Brilliant Violet 510™ anti-human CD25, PE/Dazzle™ 594 anti-human CD25, Biotin anti-human CD25, Alexa Fluor® 647 anti-human CD25, Pacific Blue™ anti-human CD25, PerCP anti-human CD25, APC/Fire™ 750 anti-human CD25, Brilliant Violet 711™ anti-human CD25, Brilliant Violet 785™ anti-human CD25, Brilliant Violet 605™ anti-human CD25, KIRAVIA Blue 520™ anti-human CD25, PE/Fire™ 700 anti-human CD25, APC/Fire™ 810 anti-human CD25, Spark NIR™ 685 anti-human CD25 Antibody, Spark YG™ 581 anti-human CD25, PE/Fire™ 640 anti-human CD25 Antibody, PE/Cyanine5 anti-human CD25, Spark Red™ 718 anti-human CD25, GMP PE anti-human CD25

Product Data



PHA-stimulated (3 days) human peripheral blood lymphocytes were stained with CD25 (clone M-A251) APC (filled histogram) or mouse IgG1, κ APC isotype control (open histogram).

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