Alexa Fluor® 488 anti-human CD25 Antibody

Catalog# / Size	356115 / 25 tests 356116 / 100 tests
Clone	M-A251
Regulatory Status	RUO
Workshop	IV A053
Other Names	IL-2 receptor α chain, Low affinity IL-2R, IL-2Rα 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-2Rα 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 Alexa Fluor® 488 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 µl per million cells in 100 µl staining volume or 5 µl per 100 µl of whole blood. * Alexa Fluor® 488 has a maximum emission of 519 nm when it is excited at 488 nm. Alexa Fluor® and Pacific Blue™ are trademarks of Life Technologies Corporation. View full statement regarding label licenses
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
Product Citations	1. Wu K, *et al.* 2021. Aging (Albany NY). 13:. PubMed 2. Buzhdygan TP, *et al.* 2020. Neurobiol Dis. 146:105131. PubMed
RRID	AB_2562165 (BioLegend Cat. No. 356115) AB_2562166 (BioLegend Cat. No. 356116)

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-2Rβ/CD122 and IL-2Rγ/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, *et al.* 1989. Leucocyte Typing IV: White Cell Differentiation Antigens. Oxford University Press. 2. Schlossman S, *et al.* 1995. Leucocyte Typing V: White Cell Differentiation Antigens. Oxford University Press. 3. Barclay N, *et al.* 1997. The Leukocyte Antigen FactsBook. Academic Press Inc. 4. Taniguchi T and Minami Y. *et al.* 1993. *Cell* 73:5. 5. Waldmann T. 1991. *J. Biol. Chem.* 266:2681.
Gene ID	3559

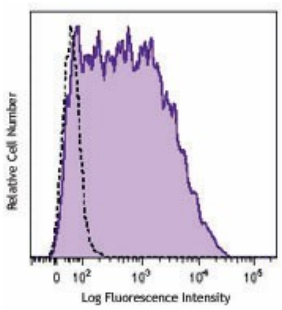
Related Protocols

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) Alexa Fluor® 488 (filled histogram) or mouse IgG1, κ Alexa Fluor® 488 isotype control (open histogram).

BioLegend Inc., 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