

## Biotin anti-human CD25 Antibody

<b>Catalog# / Size</b>	356123 / 25 µg 356124 / 100 µg
<b>Clone</b>	M-A251
<b>Regulatory Status</b>	RUO
<b>Workshop</b>	IV A053
<b>Other Names</b>	IL-2 receptor α chain, Low affinity IL-2R, IL-2Rα chain
<b>Isotype</b>	Mouse IgG1, κ
<b>Description</b>	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 <sup>+</sup> 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

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<b>Verified Reactivity</b>	Human
<b>Reported Reactivity</b>	Baboon, Cynomolgus, Rhesus
<b>Antibody Type</b>	Monoclonal
<b>Host Species</b>	Mouse
<b>Immunogen</b>	Human PHA-induced lymphocyte cells
<b>Formulation</b>	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.
<b>Preparation</b>	The antibody was purified by affinity chromatography and conjugated with biotin under optimal conditions.
<b>Concentration</b>	0.5 mg/ml
<b>Storage &amp; Handling</b>	The antibody solution should be stored undiluted between 2°C and 8°C. <b>Do not freeze.</b>
<b>Application</b>	<a href="#">FC - Quality tested</a>
<b>Recommended Usage</b>	Each lot of this antibody is quality control tested by <a href="#">immunofluorescent staining with flow cytometric analysis</a> . 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.
<b>Application Notes</b>	<p>Additional reported applications (for the relevant formats) include: immunohistochemical staining of paraformaldehyde fixed frozen sections<sup>1</sup> and spatial biology (IBEX)<sup>2,3</sup>.</p> <p>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.</p>
<b>Application References</b>	<ol style="list-style-type: none"><li>1. Li H and Pauza CD. 2015. <i>Eur. J. Immunol.</i> 45:298. (IHC)</li><li>2. Radtke AJ, et al. 2020. <i>Proc Natl Acad Sci USA.</i> 117:33455-33465. (SB) <a href="#">PubMed</a></li><li>3. Radtke AJ, et al. 2022. <i>Nat Protoc.</i> 17:378-401. (SB) <a href="#">PubMed</a></li></ol>
<b>(PubMed link indicates BioLegend citation)</b>	
<b>RRID</b>	AB_2563524 (BioLegend Cat. No. 356123) AB_2563525 (BioLegend Cat. No. 356124)

## Antigen Details

<b>Structure</b>	Type I transmembrane glycoprotein, 55 kD; low-affinity IL-2 receptor $\alpha$ chain
<b>Distribution</b>	Activated T and B cells, monocytes/macrophages, Tregs
<b>Interaction</b>	Associates with IL-2R $\beta$ /CD122 and IL-2R $\gamma$ /CD132 receptor chains to form a high-affinity IL-2R complex
<b>Ligand/Receptor</b>	IL-2
<b>Cell Type</b>	B cells, Macrophages, Monocytes, T cells, Tregs
<b>Biology Area</b>	Cell Biology, Immunology, Neuroscience, Neuroscience Cell Markers
<b>Molecular Family</b>	CD Molecules, Cytokine/Chemokine Receptors
<b>Antigen References</b>	<ol style="list-style-type: none"><li>1. Knapp W, <i>et al.</i> 1989. Leucocyte Typing IV: White Cell Differentiation Antigens. Oxford University Press.</li><li>2. Schlossman S, <i>et al.</i> 1995. Leucocyte Typing V: White Cell Differentiation Antigens. Oxford University Press.</li><li>3. Barclay N, <i>et al.</i> 1997. The Leukocyte Antigen FactsBook. Academic Press Inc.</li><li>4. Taniguchi T and Minami Y. <i>et al.</i> 1993. <i>Cell</i> 73:5.</li><li>5. Waldmann T. 1991. <i>J. Biol. Chem.</i> 266:2681.</li></ol>
<b>Gene ID</b>	<a href="#">3559</a>

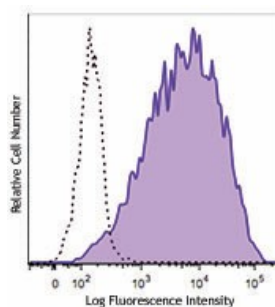
## Related Protocols

[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 biotinylated CD25 (clone M-A251, filled histogram) or mouse IgG1,  $\kappa$  isotype control (open histogram), followed by Sav-PE.

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