

## Ultra-LEAF™ Purified anti-mouse CD25 Antibody

<b>Catalog# / Size</b>	102057 / 100 µg 102040 / 1 mg 102058 / 5 mg 102059 / 25 mg 102060 / 50 mg 102061 / 100 mg
<b>Clone</b>	PC61
<b>Regulatory Status</b>	RUO
<b>Other Names</b>	IL-2R $\alpha$ , Ly-43, p55, Tac
<b>Isotype</b>	Rat IgG1, $\lambda$
<b>Description</b>	CD25 is a 55 kD glycoprotein also known as the low affinity IL-2R $\alpha$ , Ly-43, p55, or Tac. It is expressed on activated T and B cells, thymocyte subsets, pre-B cells, and T regulatory cells. In association with CD122 (IL-2R $\beta$ ) and CD132 (common $\gamma$ chain), CD25 forms the high affinity signaling IL-2 receptor.

### Product Details

<b>Verified Reactivity</b>	Mouse
<b>Antibody Type</b>	Monoclonal
<b>Host Species</b>	Rat
<b>Immunogen</b>	IL-2-dependent cytolytic mouse T-cell clone B6.1
<b>Formulation</b>	0.2 µm filtered in phosphate-buffered solution, pH 7.2, containing no preservative. Endotoxin level is <0.01 EU/µg of the protein (<0.001 ng/µg of the protein) as determined by the LAL test.
<b>Preparation</b>	The Ultra-LEAF™ (Low Endotoxin, Azide-Free) antibody was purified by affinity chromatography.
<b>Concentration</b>	The antibody is bottled at the concentration indicated on the vial, typically between 2 mg/mL and 3 mg/mL. Older lots may have also been bottled at 1 mg/mL. To obtain lot-specific concentration, please enter the lot number in our <a href="#">Concentration and Expiration Lookup</a> or <a href="#">Certificate of Analysis</a> online tools.
<b>Storage &amp; Handling</b>	The antibody solution should be stored undiluted between 2°C and 8°C. This Ultra-LEAF™ solution contains no preservative; handle under aseptic conditions.
<b>Application</b>	<a href="#">FC - Quality tested</a> <a href="#">IHC-F, IP, Block, Depletion - Reported in the literature, not verified in house</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 $\leq$ 1.0 µg per million cells in 100 µl volume or 100 µl of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.
<b>Application Notes</b>	Additional reported applications (for the relevant formats) include: immunoprecipitation <sup>1,2</sup> , <i>in vitro</i> blocking of IL-2 binding to low- and high-affinity receptors <sup>1-4</sup> , growth inhibition of IL-2-dependent T-cell lines <sup>1-4</sup> , <i>in vivo</i> depletion of CD25 <sup>+</sup> CD4 <sup>+</sup> Treg cells <sup>5-8,10</sup> , and immunohistochemical staining of acetone-fixed frozen sections <sup>2</sup> . PC61 antibody recognizes a different epitope than 3C7 antibody (Cat. No. 101902). For <i>in vivo</i> studies or highly sensitive assays, we recommend Ultra-LEAF™ purified antibody (Cat. No. 102040) with endotoxin < 0.01 EU/µg, Azide-Free, 0.2 µm filtered.
<b>Application References</b>	<ol style="list-style-type: none"> <li>1. Lowenthal JW, <i>et al.</i> 1985. <i>Nature</i> 315:669. (IP, Block)</li> <li>2. Ceredig R, <i>et al.</i> 1985. <i>Nature</i> 314:98. (IP, IHC, Block)</li> <li>3. Lowenthal JW, <i>et al.</i> 1985. <i>J. Immunol.</i> 135:3988. (Block)</li> <li>4. Moreau JL, <i>et al.</i> 1987. <i>Eur. J. Immunol.</i> 17:929. (Block)</li> <li>5. Takahashi T, <i>et al.</i> 2000. <i>J. Exp. Med.</i> 192:303. (Deplete)</li> <li>6. Onizuka S, <i>et al.</i> 1999. <i>Cancer Res.</i> 59:3128. (Deplete)</li> <li>7. Lei TC, <i>et al.</i> 2005. <i>Blood</i> 105:4865. (Deplete)</li> </ol>
<b>(PubMed link indicates BioLegend citation)</b>	

8. Pasare C, *et al.* 2004. *Immunity* 21:733. (Deplete)
9. León-Ponte M, *et al.* 2007. *Blood* 109:3139.
10. Cao OW, *et al.* 2007. *Blood* doi:10.1182/blood-2007-02-073304. (Deplete)
11. Benson MJ, *et al.* 2007. *J. Exp. Med.* doi:10.1084/jem.20070719.
12. Liu F, *et al.* 2011. *Arch Toxicol.* 85:1383. [PubMed](#)
13. Anguela XM, *et al.* 2013. *Diabetes.* 62:551. [PubMed](#)

#### Product Citations

1. Handke J, *et al.* 2021. *Front Cardiovasc Med.* 8:682458. [PubMed](#)
2. Sugiyama E, *et al.* 2020. *Sci Immunol.* 5:00. [PubMed](#)
3. Sharma M, *et al.* 2020. *Circ Res.* 127:335. [PubMed](#)

#### RRID

AB\_2813922 (BioLegend Cat. No. 102057)  
 AB\_11150394 (BioLegend Cat. No. 102040)  
 AB\_2813923 (BioLegend Cat. No. 102058)  
 AB\_2813924 (BioLegend Cat. No. 102059)  
 AB\_2813925 (BioLegend Cat. No. 102060)  
 AB\_2813926 (BioLegend Cat. No. 102061)

## Antigen Details

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<b>Structure</b>	Forms high affinity IL-2R with IL-2R $\beta$ (CD122) and IL-2R $\gamma$ (CD132), 55 kD
<b>Distribution</b>	Activated T cells and B cells, thymocyte subset, pre-B cells, T regulatory cells
<b>Function</b>	IL-2 receptor
<b>Ligand/Receptor</b>	IL-2
<b>Cell Type</b>	B cells, T cells, Thymocytes, Tregs
<b>Biology Area</b>	Immunology
<b>Molecular Family</b>	CD Molecules, Cytokine/Chemokine Receptors

#### Antigen References

1. Taniguchi T, *et al.* 1993. *Cell* 73:5-8.
2. Waldmann TA. 1991. *J Biol Chem.* 266:2681-4.
3. Read S, *et al.* 2000. *J Exp Med.* 192:295-302.
4. Lowenthal JW, *et al.* 1985. *J Immunol.* 135:3988-94.

#### Gene ID

[16184](#)

## Related Protocols

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[Cell Surface Flow Cytometry Staining Protocol](#)

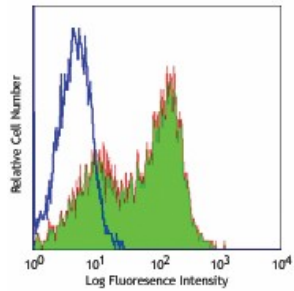
## Other Formats

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APC anti-mouse CD25, Biotin anti-mouse CD25, FITC anti-mouse CD25, PE anti-mouse CD25, PE/Cyanine5 anti-mouse CD25, Purified anti-mouse CD25, PE/Cyanine7 anti-mouse CD25, Alexa Fluor® 488 anti-mouse CD25, Alexa Fluor® 647 anti-mouse CD25, Pacific Blue™ anti-mouse CD25, Alexa Fluor® 700 anti-mouse CD25, APC/Cyanine7 anti-mouse CD25, PerCP/Cyanine5.5 anti-mouse CD25, PerCP anti-mouse CD25, Brilliant Violet 421™ anti-mouse CD25, Brilliant Violet 605™ anti-mouse CD25, Brilliant Violet 650™ anti-mouse CD25, Ultra-LEAF™ Purified anti-mouse CD25, Brilliant Violet 510™ anti-mouse CD25, PE/Dazzle™ 594 anti-mouse CD25, Brilliant Violet 711™ anti-mouse CD25, Brilliant Violet 785™ anti-mouse CD25, Alexa Fluor® 594 anti-mouse CD25, APC/Fire™ 750 anti-mouse CD25, TotalSeq™-A0097 anti-mouse CD25, KIRAVIA Blue 520™ anti-mouse CD25, TotalSeq™-B0097 anti-mouse CD25, TotalSeq™-C0097 anti-mouse CD25, Spark NIR™ 685 anti-mouse CD25 Antibody, PE/Fire™ 640 anti-mouse CD25, Spark YG™ 581 anti-mouse CD25, APC/Fire™ 810 anti-mouse CD25

## Product Data

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Con A-stimulated (3 days) BALB/c mouse splenocytes stained with LEAF™ purified PC61, followed by anti-rat IgG FITC

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