

Ultra-LEAF™ Purified anti-mouse CD25 Antibody

Catalog# / Size	102057 / 100 µg 102040 / 1 mg 102058 / 5 mg 102059 / 25 mg 102060 / 50 mg 102061 / 100 mg
Clone	PC61
Regulatory Status	RUO
Other Names	IL-2R α , Ly-43, p55, Tac
Isotype	Rat IgG1, λ
Description	CD25 is a 55 kD glycoprotein also known as the low affinity IL-2R α , 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 β) and CD132 (common γ chain), CD25 forms the high affinity signaling IL-2 receptor.

Product Details

Verified Reactivity	Mouse
Antibody Type	Monoclonal
Host Species	Rat
Immunogen	IL-2-dependent cytolytic mouse T-cell clone B6.1
Formulation	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.
Preparation	The Ultra-LEAF™ (Low Endotoxin, Azide-Free) antibody was purified by affinity chromatography.
Concentration	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 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. This Ultra-LEAF™ solution contains no preservative; handle under aseptic conditions.
Application	FC - Quality tested IHC-F, IP, Block, Depletion - Reported in the literature, not verified in house
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 \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.
Application Notes	Additional reported applications (for the relevant formats) include: immunoprecipitation ^{1,2} , <i>in vitro</i> blocking of IL-2 binding to low- and high-affinity receptors ¹⁻⁴ , growth inhibition of IL-2-dependent T-cell lines ¹⁻⁴ , <i>in vivo</i> depletion of CD25 ⁺ CD4 ⁺ Treg cells ^{5-8,10} , and immunohistochemical staining of acetone-fixed frozen sections ² . 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.
Application References	<ol style="list-style-type: none"> 1. Lowenthal JW, <i>et al.</i> 1985. <i>Nature</i> 315:669. (IP, Block) 2. Ceredig R, <i>et al.</i> 1985. <i>Nature</i> 314:98. (IP, IHC, Block) 3. Lowenthal JW, <i>et al.</i> 1985. <i>J. Immunol.</i> 135:3988. (Block) 4. Moreau JL, <i>et al.</i> 1987. <i>Eur. J. Immunol.</i> 17:929. (Block) 5. Takahashi T, <i>et al.</i> 2000. <i>J. Exp. Med.</i> 192:303. (Deplete) 6. Onizuka S, <i>et al.</i> 1999. <i>Cancer Res.</i> 59:3128. (Deplete) 7. Lei TC, <i>et al.</i> 2005. <i>Blood</i> 105:4865. (Deplete)
(PubMed link indicates BioLegend citation)	

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

Structure	Forms high affinity IL-2R with IL-2R β (CD122) and IL-2R γ (CD132), 55 kD
Distribution	Activated T cells and B cells, thymocyte subset, pre-B cells, T regulatory cells
Function	IL-2 receptor
Ligand/Receptor	IL-2
Cell Type	B cells, T cells, Thymocytes, Tregs
Biology Area	Immunology
Molecular Family	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](#)

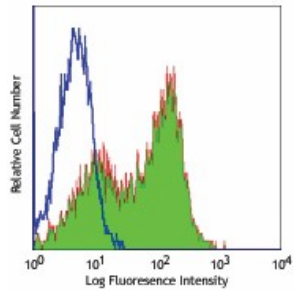
Related Protocols

[Cell Surface Flow Cytometry Staining Protocol](#)

Other Formats

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



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

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