

## Spark PLUS B550™ anti-mouse CD25 Antibody

<b>Catalog# / Size</b>	102087 / 25 µg 102088 / 100 µg
<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

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<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>	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide
<b>Preparation</b>	The antibody was purified by affinity chromatography and conjugated with Spark PLUS B550™ under optimal conditions.
<b>Concentration</b>	0.2 mg/mL
<b>Storage &amp; Handling</b>	The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. <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 $\leq 0.125$ µg per million cells in 100 µL volume. It is recommended that the reagent be titrated for optimal performance for each application.  * Spark PLUS B550™ has a maximum excitation of 516 nm and a maximum emission of 540 nm.
<b>Excitation Laser</b>	Blue Laser (488 nm)
<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.

## Application References

(PubMed link indicates  
BioLegend citation)

1. Lowenthal JW, *et al.* 1985. *Nature* 315:669. (IP, Block)
2. Ceredig R, *et al.* 1985. *Nature* 314:98. (IP, IHC, Block)
3. Lowenthal JW, *et al.* 1985. *J. Immunol.* 135:3988. (Block)
4. Moreau JL, *et al.* 1987. *Eur. J. Immunol.* 17:929. (Block)
5. Takahashi T, *et al.* 2000. *J. Exp. Med.* 192:303. (Deplete)
6. Onizuka S, *et al.* 1999. *Cancer Res.* 59:3128. (Deplete)
7. Lei TC, *et al.* 2005. *Blood* 105:4865. (Deplete)
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](#)

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## RRID

AB\_3683128 (BioLegend Cat. No. 102087)  
AB\_3683128 (BioLegend Cat. No. 102088)

## 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](#)

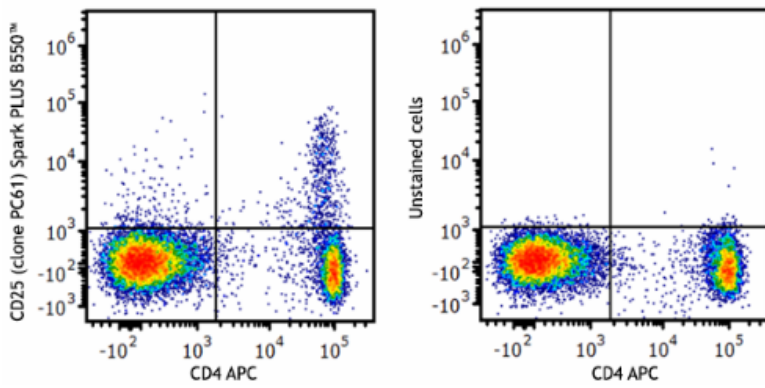
## Other Formats

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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, Brilliant Violet 750™ anti-mouse CD25, PerCP/Fire™ 780 anti-mouse CD25, PE/Fire™ 700 anti-mouse CD25, Spark PLUS UV395™ anti-mouse CD25, Spark Blue™ 574 anti-mouse CD25 (Flexi-Fluor™), PerCP/Fire™ 806 anti-mouse CD25 Antibody, Spark PLUS B550™ anti-mouse CD25, Spark YG™ 593 anti-mouse CD25 (Flexi-Fluor™) Antibody, Spark UV™ 387 anti-mouse CD25 (Flexi-Fluor™), Spark PLUS V475™ anti-mouse CD25 Antibody

## Product Data

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C57BL/6 mouse splenocytes were stained with anti-mouse CD4 (clone GK1.5) APC and anti-mouse CD25 (clone PC61) Spark PLUS B550™ (left) or stained with anti-mouse CD4 (clone GK1.5) APC only (right).

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 Toll-Free Phone: 1-877-Bio-Legend (246-5343) Phone: (858) 768-5800 Fax: (877) 455-9587