

FITC anti-mouse CD25 Antibody

Catalog# / Size 102005 / 50 µg 102006 / 500 µg

PC61 Clone

Other Names IL-2Rα, Ly-43, p55, Tac

Isotype Rat IgG1, λ

Description CD25 is a 55 kD glycoprotein also known as the low affinity IL-2Ra, 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

Reactivity Mouse

Antibody Type Monoclonal

Host Species

Immunogen IL-2-dependent cytolytic mouse T-cell clone B6.1

Formulation Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.

Preparation The antibody was purified by affinity chromatography, and conjugated with FITC under optimal

Concentration 0.5 mg/ml

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 ≤1.0 µg per million cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each

Excitation Laser Blue Laser (488 nm)

Application Notes

Additional reported applications (for the relevant formats) include: immunoprecipitation¹², *in vitro* blocking of IL-2 binding to low- and high-affinity receptors¹⁴, growth inhibition of IL-2-dependent T-cell lines¹⁴, *in vivo* depletion of CD25⁺CD4⁺ Treg cells⁵⁵³, and immunohistochemical staining of acetonefixed frozen sections². PC61 antibody recognizes a different epitope than 3C7 antibody (Cat. No. 101902). The LEAF™ purified antibody (Endotoxin < 0.1 EU/µg, Azide-Free, 0.2 µm filtered) is recommended for functional assays. For in vivo studies or highly sensitive assays, we recommend Ultra-LEAF™ purified antibody (Cat. No. 102040) with a lower endotoxin limit than standard LEAF™

purified antibodies (Endotoxin < 0.01 EU/µg).

Application References

(PubMed link indicates BioLegend citation)

- 1. Lowenthal JW, et al. 1985. Nature 315:669. (IP, Block)
- Ceredig R, et al. 1985. Nature 314:98. (IP, IHC, Block) Lowenthal JW, et al. 1985. J. Immunol. 135:3988. (Block)
- Moreau JL, et al. 1987. Eur. J. Immunol. 17:929. (Block)
- Takahashi T, et al. 2000. J. Exp. Med. 192:303. (Deplete)
- Onizuka S, et al. 1999. Cancer Res. 59:3128. (Deplete)
- 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

Product Citations

- 1. Carbonnelle D, et al. 2009. J Pharmacol Exp Ther. 331:771. PubMed
- 2. Toubaji A, et al. 2007. Vaccine. 25:5882. PubMed
- 3. Xia S, et al. 2014. J Leukoc Biol. 95:733. PubMed
- Naik A. et al. 2015. J Immunol. 194:790. PubMed 5. Thornton T, et al. 2016. Nat Commun. 7:10553. PubMed

- 6. Kang J, Lee J, Chang J 2016. PLoS One. 11: 0157015. PubMed 7. Mier-Aguilar C, et al. 2016. PLoS One. 11:e0168155. PubMed
- Cerina M, et al. 2017. Brain Behav Immun. 59:103-117. PubMed
- 9. Schuster M, et al. 2017. J Immunol. 199:920. PubMed
- 10. Schuster M, et al. 2019. Front Immunol. 10:1583. PubMed
- 11. Sasaki K, et al. 2019. Nat Commun. 10:3878. PubMed
- 12. Celis-Gutierrez J et al. 2019. Cell Rep. 27(11):3315-3330 . PubMed

RRID AB_312854 (BioLegend Cat. No. 102005) AB_312855 (BioLegend Cat. No. 102006)

Antigen Details

Forms high affinity IL-2R with IL-2R β (CD122) and IL-2R γ (CD132), 55 kD Structure

Distribution Activated T cells and B cells, thymocyte subset, pre-B cells, T regulatory cells

Function IL-2 receptor

Ligand/Receptor 11 -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.

2. Waldmann TA. 1991. J. Biol. Chem. 266:2681. 3. Read S, et al. 2000. J. Exp. Med. 192:295. 4. Lowenthal JW, et al. 1985. J. Immunol. 135:3988.

Gene ID

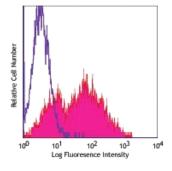
Related Protocols

Cell Surface Flow Cytometry Staining Protocol

Other Formats

APC anti-mouse CD25, Biotin 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

Product Data



Con-A Stimulated (3 days) BALB/c mouse splenocytes stained with PC61

For research use only. Not for diagnostic use. Not for resale. BioLegend will not be held responsible for patent infringement or other violations that may occur with the use of our products.

*These products may be covered by one or more Limited Use Label Licenses (see the BioLegend Catalog or our website, www.biolegend.com/ordering#license). BioLegend products may not be transferred to third parties, resold, modified for resale, or used to manufacture commercial products, reverse engineer functionally similar materials, or to provide a service to third parties without written approval of BioLegend. By use of these products you accept the terms and conditions of all applicable Limited Use Label Licenses.

Unless otherwise indicated, these products are for research use only and are not intended for human or animal diagnostic, therapeutic or commercial use.

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