TotalSeq™-B0097 anti-mouse CD25 Antibody

Catalog# / Size	102067 / 10 µg
Clone	PC61
Regulatory Status	RUO
Other Names	IL-2Rα, Ly-43, p55, Tac
Isotype	Rat IgG1, λ
Barcode Sequence	ACCATGAGACACAGT
Description	CD25 is a 55 kD glycoprotein also known as the low affinity IL-2Rα, 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-2Rβ) 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	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 1 mM EDTA
Preparation	The antibody was purified by chromatography and conjugated with TotalSeq™-B oligomer under optimal conditions.
Concentration	0.5 mg/mL
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C. **Do not freeze**.
Application	PG - *Quality tested*
Recommended Usage	Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis and the oligomer sequence is confirmed by sequencing. TotalSeq™-B antibodies are compatible with 10x Genomics Single Cell Gene Expression Solutions. To maximize performance, it is strongly recommended that the reagent be titrated for each application, and that you centrifuge the antibody dilution before adding to the cells at 14,000xg at 2 - 8°C for 10 minutes. Carefully pipette out the liquid avoiding the bottom of the tube and add to the cell suspension. For Proteogenomics analysis, the suggested starting amount of this reagent for titration is ≤ 1.0 µg per million cells in 100 µL volume. Refer to the corresponding TotalSeq™ protocol for specific staining instructions. Buyer is solely responsible for determining whether Buyer has all intellectual property rights that are necessary for Buyer's intended uses of the BioLegend TotalSeq™ products. For example, for any technology platform Buyer uses with TotalSeq™, it is Buyer's sole responsibility to determine whether it has all necessary third party intellectual property rights to use that platform and TotalSeq™ with that platform.
Application Notes	Additional reported applications (for the relevant formats) include: immunoprecipitation[1,2], *in vitro* blocking of IL-2 binding to low- and high-affinity receptors[1-4], growth inhibition of IL-2-dependent T-cell lines[1-4], *in vivo* 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 *in vivo* 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.
Additional Product Notes	TotalSeq™ reagents are designed to profile protein levels at a single cell level following an optimized protocol similar to the CITE-seq workflow. A compatible single cell device (e.g. 10x Genomics Chromium System and Reagents) and sequencer (e.g. Illumina analyzers) are required. Please contact technical support for more information, or visit biolegend.com/totalseq.

The barcode flanking sequences are GTGACTGGAGTTCAGACGTGTGCTCTTCCGATCTNNNNNNNNN (PCR handle), and NNNNNNNNNGCTTTAAGGCCGGTCCTAGC*A*A (capture sequence). N represents either randomly selected A, C, G, or T, and * indicates a phosphorothioated bond, to prevent nuclease degradation.

View more applications data for this product in our Scientific Poster Library.

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
13. Anguela XM, *et al.* 2013. *Diabetes.* 62:551. PubMed

RRID

AB_2860592 (BioLegend Cat. No. 102067)

Antigen Details

Structure

Forms high affinity IL-2R with IL-2Rβ (CD122) and IL-2Rγ (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

TotalSeq™-B or -C with 10x Feature Barcoding Technology

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

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