

TotalSeq™-C0097 anti-mouse CD25 Antibody

Catalog# / Size	102065 / 10 µg
Clone	PC61
Regulatory Status	RUO
Other Names	IL-2R α , 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-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	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™-C 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	<p>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™-C antibodies are compatible with 10x Genomics Chromium Single Cell Immune Profiling Solution.</p> <p>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.</p> <p>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.</p>
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.
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 CGGAGATGTGTATAAGAGACAGNNNNNNNNNN (PCR handle), and NNNNNNNNNCCCATATAAGA*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_2876399 (BioLegend Cat. No. 102065)

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	<ol style="list-style-type: none">1. Taniguchi T, et al. 1993. <i>Cell</i> 73:5-8.2. Waldmann TA. 1991. <i>J Biol Chem.</i> 266:2681-4.3. Read S, et al. 2000. <i>J Exp Med.</i> 192:295-302.4. Lowenthal JW, et al. 1985. <i>J Immunol.</i> 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

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