

TotalSeq™-C0390 anti-human CD127 (IL-7Rα) Antibody

Catalog# / Size	351356 / 10 µg
Clone	A019D5
Regulatory Status	RUO
Other Names	IL-7 receptor α chain, IL-7Rα
Isotype	Mouse IgG1, κ
Barcode Sequence	GTGTGTTGTCCTATG
Description	CD127 is a 60-90 kD type I transmembrane glycoprotein also known as IL-7 receptor α chain or IL-7Rα. It forms a heterodimer with the common γ chain (γc or CD132) which is shared with the receptors for IL-2, IL-4, IL-9, IL-13, IL-15, and IL-21. CD127 is expressed on immature B cells through early pre-B stage cells, thymocytes (except CD4/CD8 double positive thymocytes), peripheral T cells, and bone marrow stromal cells. CD127 has been reported to be a useful marker for identifying memory and effector T cells. Studies have shown that CD127 expression is down-modulated on Treg cells. It can be used as a marker for differentiation of Treg and conventional T cells. The ligation of IL-7 with its receptor is important for stimulation of mature and immature T cells as well as immature B cell proliferation and development.

Product Details

Verified Reactivity	Human
Reported Reactivity	African Green, Baboon, Cynomolgus, Rhesus
Antibody Type	Monoclonal
Host Species	Mouse
Immunogen	Recombinant human CD127
Purity	The antibody was purified by chromatography and conjugated with TotalSeq™-C oligomer under optimal conditions. The solution is free of unconjugated DNA and unconjugated antibody.
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 1 mM EDTA.
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™-C antibodies are compatible with 10x Genomics Chromium Single Cell Immune Profiling Solution . 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 (for the relevant formats) application: proteogenomics ¹ .
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

1. Peterson VM, *et al.* 2017. *Nat. Biotechnol.* 35:936. (PG)

Product Citations

1. Pizzolla A, *et al.* 2021. *Methods Mol Biol.* 2265:529. [PubMed](#)
2. Bachireddy P, *et al.* 2021. *Cell Rep.* 37:109992. [PubMed](#)
3. Rode AKO, *et al.* 2022. *Cells.* 11:. [PubMed](#)
4. Shanguan S, *et al.* 2021. *Elife.* 10:. [PubMed](#)
5. Ferreira-Gomes M, *et al.* 2021. *Nat Commun.* 12:1961. [PubMed](#)

RRID

AB_2800937 (BioLegend Cat. No. 351356)

Antigen Details

Structure	Type I transmembrane glycoprotein, associates with CD132, 60-90 kD
Distribution	Immature B cells through early pre-B stage, thymocytes (except CD4/CD8 double positive thymocytes), peripheral T cells, bone marrow stromal cells
Function	T cell and immature B cell proliferation and development
Ligand/Receptor	IL-7
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. Sudo T, <i>et al.</i> 1993. <i>P. Natl. Acad. Sci. USA</i> 90:9125.2. He YW and Malek TR. 1998. <i>Crit. Rev. Immunol.</i> 18:503.3. Huster KM, <i>et al.</i> 2004. <i>P. Natl. Acad. Sci. USA</i> 101:5610.4. Pillai M, <i>et al.</i> 2004. <i>Leukemia Lymphoma</i> 45:2403.5. Morrissey PJ, <i>et al.</i> 1989. <i>J. Exp. Med.</i> 169:707.6. Liu W, <i>et al.</i> 2006. <i>J. Exp. Med.</i> 203:1701.
Gene ID	3575

Related Protocols

[TotalSeq™-B or -C with 10x Feature Barcoding Technology](#)

Other Formats

Purified anti-human CD127 (IL-7R α), PE anti-human CD127 (IL-7R α), Pacific Blue™ anti-human CD127 (IL-7R α), Brilliant Violet 421™ anti-human CD127 (IL-7R α), FITC anti-human CD127 (IL-7R α), Alexa Fluor® 488 anti-human CD127 (IL-7R α), APC anti-human CD127 (IL-7R α), Alexa Fluor® 647 anti-human CD127 (IL-7R α), PE/Cyanine7 anti-human CD127 (IL-7R α), PerCP/Cyanine5.5 anti-human CD127 (IL-7R α), Brilliant Violet 570™ anti-human CD127 (IL-7R α), PE/Cyanine5 anti-human CD127 (IL-7R α), Brilliant Violet 650™ anti-human CD127 (IL-7R α), Brilliant Violet 711™ anti-human CD127 (IL-7R α), Brilliant Violet 785™ anti-human CD127 (IL-7R α), Brilliant Violet 510™ anti-human CD127 (IL-7R α), Brilliant Violet 605™ anti-human CD127 (IL-7R α), PE/Dazzle™ 594 anti-human CD127 (IL-7R α), Purified anti-human CD127 (IL-7R α) (Maxpar® Ready), Alexa Fluor® 700 anti-human CD127 (IL-7R α), Biotin anti-human CD127 (IL-7R α), APC/Cyanine7 anti-human CD127 (IL-7R α), APC/Fire™ 750 anti-human CD127 (IL-7R α), TotalSeq™-A0390 anti-human CD127 (IL-7R α), TotalSeq™-B0390 anti-human CD127 (IL-7R α), TotalSeq™-C0390 anti-human CD127 (IL-7R α), KIRAVIA Blue 520™ anti-human CD127 (IL-7R α), Spark NIR™ 685 anti-human CD127 (IL-7R α), PE/Fire™ 640 anti-human CD127 (IL-7R α), PE/Fire™ 700 anti-human CD127 (IL-7R α) Antibody, Spark YG™ 581 anti-human CD127 (IL-7R α), Brilliant Violet 750™ anti-human CD127 (IL-7R α), TotalSeq™-D0390 anti-human CD127 (IL-7R α), APC/Fire™ 810 anti-human CD127 (IL-7R α) Antibody, APC/Fire™ 750 anti-human CD127, PE anti-human CD127, PerCP/Cyanine5.5 anti-human CD127, PE/Cyanine7 anti-human CD127, Spark Red™ 718 anti-human CD127 (IL-7R α)

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