GMP PE/Cyanine7 anti-human CD127 (IL-7Rα) Antibody

Catalog# / Size	260286 / 100 tests
Clone	A019D5
Other Names	IL-7 receptor α chain, IL-7Rα
Isotype	Mouse IgG1, κ
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

Reactivity	Human
Reported Reactivity	African Green, Baboon, Cynomolgus, Rhesus
Antibody Type	Monoclonal
Host Species	Mouse
Immunogen	Recombinant human CD127
Formulation	Phosphate-buffered solution, pH 7.2, containing True-Stain Monocyte Blocker™, 0.09% sodium azide and 0.2% (w/v) BSA (origin USA) and a stabilizer.
Preparation	The antibody was purified by affinity chromatography and conjugated with PE/Cyanine7 under optimal conditions.
Concentration	100.0 µg/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 5 µL per million cells in 100 µL staining volume or 5 µL per 100 µL of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.
Excitation Laser	Blue Laser (488 nm) Green Laser (532 nm)/Yellow-Green Laser (561 nm)
Application Notes	Additional reported (for the relevant formats) application: proteogenomics[1].
Application References **(PubMed link indicates BioLegend citation)**	1. Peterson VM, *et al*. 2017. *Nat. Biotechnol*. 35:936. (PG)
Disclaimer	**GMP RUO Flow Cytometry Antibodies.** BioLegend GMP RUO fluorophore conjugated antibodies are manufactured in a dedicated GMP facility and compliant with ISO 13485:2016. For research use only. Not for use in diagnostic or therapeutic procedures. Our processes include: • Batch-to-batch consistency • Material traceability • Documented procedures • Documented employee training

- Equipment maintenance and monitoring records
- Lot-specific certificates of analysis
- Quality audits per ISO 13485:2016
- QA review of released products

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	1. Sudo T, *et al.* 1993. *P. Natl. Acad. Sci. USA* 90:9125. 2. He YW and Malek TR. 1998. *Crit. Rev. Immunol.* 18:503. 3. Huster KM, *et al.* 2004. *P. Natl. Acad. Sci. USA* 101:5610. 4. Pillai M, *et al.* 2004. *Leukemia Lymphoma* 45:2403. 5. Morrissey PJ, *et al.* 1989. *J. Exp. Med.* 169:707. 6. Liu W, *et al.* 2006. *J. Exp. Med.* 203:1701.
Gene ID	3575

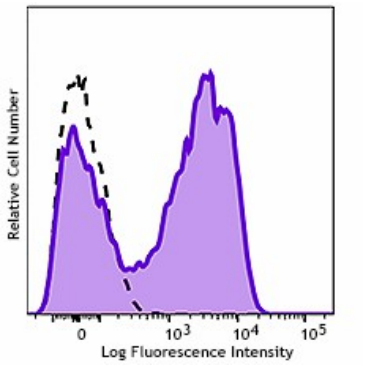
Related Protocols

Cell Surface Flow Cytometry Staining Protocol

Other Formats

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

Product Data



Typical results from human peripheral blood lymphocytes stained either with A019D5 PE/Cyanine7 used at 5 µL/test (filled histogram) or with an isotype control (open histogram).

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