PerCP/Cyanine5.5 anti-human CD127 (IL-7Rα) Antibody

Catalog# / Size	351321 / 25 tests 351322 / 100 tests
Clone	A019D5
Regulatory Status	RUO
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

Verified 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 0.09% sodium azide and BSA (origin USA)
Preparation	The antibody was purified by affinity chromatography and conjugated with PerCP/Cyanine5.5 under optimal conditions.
Concentration	Lot-specific (to obtain lot-specific concentration, please enter the lot number in our Concentration and Expiration Lookup or Certificate of Analysis online tools.)
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. * PerCP/Cyanine5.5 has a maximum absorption of 482 nm and a maximum emission of 690 nm.
Application Notes	Additional reported (for the relevant formats) application: proteogenomics[1].
Additional Product Notes	View more applications data for this product in our Scientific Poster Library. BioLegend is in the process of converting the name PerCP/Cy5.5 to PerCP/Cyanine5.5. The dye molecule remains the same, so you should expect the same quality and performance from our PerCP/Cyanine5.5 products. Contact Technical Service if you have any questions.
Application References **(PubMed link indicates BioLegend citation)**	1. Peterson VM, *et al*. 2017. *Nat. Biotechnol*. 35:936. (PG)
Product Citations	

1. Fujigaki J, *et al.* 2015. PLoS One. 10: 0132521. PubMed
2. Palamides P, *et al.* 2016. Dis Model Mech. 9: 985 - 997. PubMed
3. Pan YG, *et al.* 2021. Immunity. 54(6):1245-1256.e5. PubMed
4. Schmidleithner L *et al.* 2019. Immunity. 50(5):1232-1248 . PubMed
5. Santoni de Sio FR, *et al.* 2018. J Allergy Clin Immunol. 142:1909. PubMed
6. Goodwin M, *et al.* 2020. Sci Adv. 6:eaaz0571. PubMed
7. Ramien C, *et al.* 2020. Cell Reports. 29(4):810-815. PubMed

RRID

AB_10900253 (BioLegend Cat. No. 351321)
AB_10897104 (BioLegend Cat. No. 351322)

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

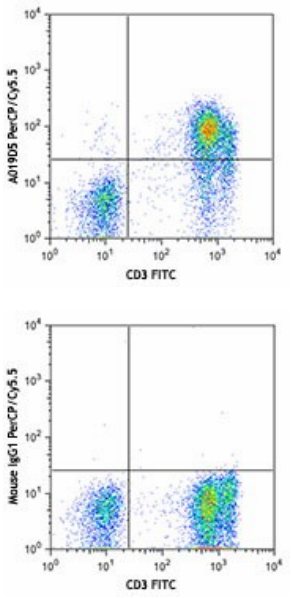
Related Protocols

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



Human peripheral blood lymphocytes were stained with CD3 FITC and CD127 (clone A019D5) PerCP/Cyanine5.5 (top) or mouse IgG1 PerCP/Cyanine5.5 isotype control (bottom).

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