

PE/Cyanine7 anti-human CD127 (IL-7R α) Antibody

Catalog# / Size	351319 / 25 tests 351320 / 100 tests
Clone	A019D5
Regulatory Status	RUO
Other Names	IL-7 receptor α chain, IL-7R α
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-7R α . It forms a heterodimer with the common γ chain (γ c 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 PE/Cyanine7 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 μ l per million cells in 100 μ l staining volume or 5 μ l per 100 μ l of whole blood.
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 .
Additional Product Notes	BioLegend is in the process of converting the name PE/Cy7 to PE/Cyanine7. The dye molecule remains the same, so you should expect the same quality and performance from our PE/Cyanine7 products. Please contact Technical Service if you have any questions.
Application References (PubMed link indicates BioLegend citation)	1. Peterson VM, <i>et al.</i> 2017. <i>Nat. Biotechnol.</i> 35:936. (PG)
Product Citations	1. Yang M, <i>et al.</i> 2019. <i>Cell Physiol Biochem.</i> 52:1178. PubMed

2. Kim CJ, *et al.* 2018. *Immunity*. 49:1034. [PubMed](#)
3. Turner JA, *et al.* 2020. *Immunity*. 53:1202. [PubMed](#)
4. Delacher M, *et al.* 2021. *Immunity*. 54(4):702-720.e17. [PubMed](#)
5. Mashiko S, *et al.* 2015. *J Allergy Clin Immunol*. 136: 351-359. [PubMed](#)
6. Catapano M, *et al.* 2020. *J Invest Dermatol*. 140:816. [PubMed](#)
7. Withers D, *et al.* 2016. *Nat Med*. 22:319-23. [PubMed](#)
8. Nicholas DA *et al.* 2019. *Cell Metab*. 30(3):447-461 . [PubMed](#)
9. Hurrell BP, *et al.* 2019. *Cell Rep*. 29:4509. [PubMed](#)
10. Harb H, *et al.* 2021. *Immunity*. 54(6):1186-1199.e7. [PubMed](#)
11. Idorn M, *et al.* 2018. *Oncoimmunology*. 7:e1412029. [PubMed](#)
12. Hardman CS, *et al.* 2021. *Sci Immunol*. 6:. [PubMed](#)
13. Lundtoft C, *et al.* 2017. *PLoS Pathogens*. 13(6):e1006425. [PubMed](#)
14. Shafiei-Jahani P, *et al.* 2021. *Nat Commun*. 12:2526. [PubMed](#)
15. Galle-Treger L, *et al.* 2019. *Nat Commun*. 10:713. [PubMed](#)
16. Knoop J, *et al.* 2020. *Diabetes*. 661:69. [PubMed](#)
17. Waddington KE, *et al.* 2020. *Front Immunol*. 1.51875. [PubMed](#)
18. Saraiva DP, *et al.* 2018. *Front Immunol*. 2.184027778. [PubMed](#)
19. Reuschl AK, *et al.* 2022. *Cell Rep*. 39:110650. [PubMed](#)
20. Serr I, *et al.* 2016. *Nat Commun*. 7:10991. [PubMed](#)
21. Goc J, *et al.* 2021. *Cell*. :. [PubMed](#)
22. Nasrallah R, *et al.* 2020. *Nature*. 583:447. [PubMed](#)

RRID AB_10899414 (BioLegend Cat. No. 351319)
 AB_10897098 (BioLegend Cat. No. 351320)

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

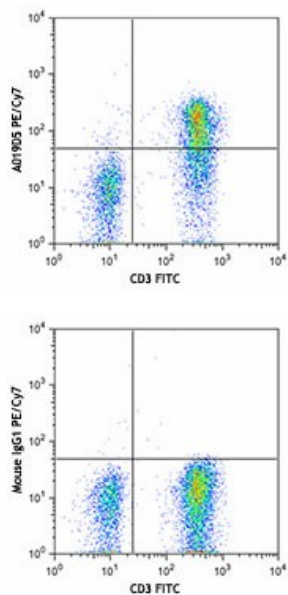
[Cell Surface Flow Cytometry Staining Protocol](#)

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-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) PE/Cyanine7 (top) or mouse IgG1 PE/Cyanine7 isotype control (bottom).

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.

BioLegend Inc., 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