

Spark YG™ 581 anti-human CD127 (IL-7R α) Antibody

Catalog# / Size	351367 / 25 tests 351368 / 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 Spark YG™ 581 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. It is recommended that the reagent be titrated for optimal performance for each application. * Spark YG™ 581 has a maximum excitation of 562 nm and a maximum emission of 581 nm.
Excitation Laser	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, <i>et al.</i> 2017. <i>Nat. Biotechnol.</i> 35:936. (PG)
RRID	AB_2890778 (BioLegend Cat. No. 351367) AB_2890778 (BioLegend Cat. No. 351368)

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, et al. 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, et al. 2004. <i>P. Natl. Acad. Sci. USA</i> 101:5610.4. Pillai M, et al. 2004. <i>Leukemia Lymphoma</i> 45:2403.5. Morrissey PJ, et al. 1989. <i>J. Exp. Med.</i> 169:707.6. Liu W, et al. 2006. <i>J. Exp. Med.</i> 203:1701.
Gene ID	3575

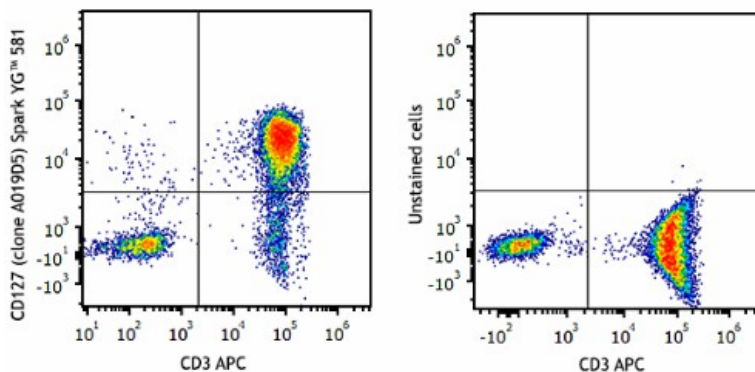
Related Protocols

[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-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)

Product Data



Human peripheral blood lymphocytes were stained with anti-human CD3 APC and anti-human CD127 (IL-7R α) (clone A019D5) Spark YG™ 581 (left) or stained with anti-human CD3 APC only (right).

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