

Brilliant Violet 605™ anti-human CD127 (IL-7R α) Antibody

Catalog# / Size	351333 / 25 tests 351334 / 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 Brilliant Violet 605™ 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	<p>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.</p> <p>Brilliant Violet 605™ excites at 405 nm and emits at 603 nm. The bandpass filter 610/20 nm is recommended for detection, although filter optimization may be required depending on other fluorophores used. Be sure to verify that your cytometer configuration and software setup are appropriate for detecting this channel. Refer to your instrument manual or manufacturer for support. Brilliant Violet 605™ is a trademark of Sirigen Group Ltd.</p> <p>Learn more about Brilliant Violet™.</p> <p>This product is subject to proprietary rights of Sirigen Inc. and is made and sold under license from Sirigen Inc. The purchase of this product conveys to the buyer a non-transferable right to use the purchased product for research purposes only. This product may not be resold or incorporated in any manner into another product for resale. Any use for therapeutics or diagnostics is strictly prohibited. This product is covered by U.S. Patent(s), pending patent applications and foreign equivalents.</p>
Excitation Laser	Violet Laser (405 nm)

Application Notes	Additional reported (for the relevant formats) application: proteogenomics ¹ .
Application References	1. Peterson VM, <i>et al.</i> 2017. <i>Nat. Biotechnol.</i> 35:936. (PG)
(PubMed link indicates BioLegend citation)	
Product Citations	<ol style="list-style-type: none"> Rueschenbaum S, <i>et al.</i> 2021. <i>Front Immunol.</i> 11:581352. PubMed Cella M, <i>et al.</i> 2019. <i>Nat Immunol.</i> 1.513888889. PubMed Kim P, <i>et al.</i> 2014. <i>J Immunol.</i> 192:2622. PubMed Camio MJ, <i>et al.</i> 2021. <i>Cell Reports.</i> 35(2):108974. PubMed Herrera FG, <i>et al.</i> 2019. <i>Int J Radiat Oncol Biol Phys.</i> 103:320. PubMed Wild K, <i>et al.</i> 2021. <i>Nat Commun.</i> 12:6720. PubMed Zhu S, <i>et al.</i> 2022. <i>J Oncol.</i> 2022:8724933. PubMed Omer OS, <i>et al.</i> 2020. <i>Methods Mol Biol.</i> 2121:199. PubMed Sekine T, <i>et al.</i> 2020. <i>Cell.</i> 183:158. PubMed Gao X, <i>et al.</i> 2022. <i>iScience.</i> 25:104911. PubMed Riese P, <i>et al.</i> 2022. <i>Nat Commun.</i> 13:6894. PubMed Csomós K, <i>et al.</i> 2022. <i>Nat Immunol.</i> 23:1256. PubMed
RRID	AB_2562019 (BioLegend Cat. No. 351333) AB_2562022 (BioLegend Cat. No. 351334)

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

Related Protocols

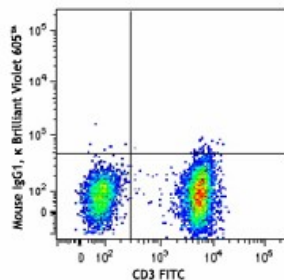
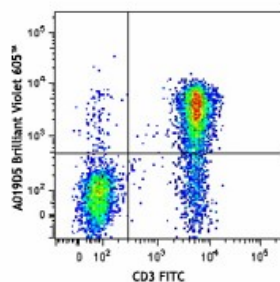
[Cell Surface Flow Cytometry Staining Protocol](#)

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-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 CD3 FITC and CD127 (clone A019D5) Brilliant Violet 605™ (top) or mouse IgG1, κ Brilliant Violet 605™ 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