

## Pacific Blue™ anti-human CD127 (IL-7R $\alpha$ ) Antibody

<b>Catalog# / Size</b>	351305 / 25 tests 351306 / 100 tests
<b>Clone</b>	A019D5
<b>Regulatory Status</b>	RUO
<b>Other Names</b>	IL-7 receptor $\alpha$ chain, IL-7R $\alpha$
<b>Isotype</b>	Mouse IgG1, $\kappa$
<b>Description</b>	CD127 is a 60-90 kD type I transmembrane glycoprotein also known as IL-7 receptor $\alpha$ chain or IL-7R $\alpha$ . It forms a heterodimer with the common $\gamma$ chain ( $\gamma$ 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

---

<b>Verified Reactivity</b>	Human
<b>Reported Reactivity</b>	African Green, Baboon, Cynomolgus, Rhesus
<b>Antibody Type</b>	Monoclonal
<b>Host Species</b>	Mouse
<b>Immunogen</b>	Recombinant human CD127
<b>Formulation</b>	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA)
<b>Preparation</b>	The antibody was purified by affinity chromatography, and conjugated with Pacific Blue™ under optimal conditions.
<b>Concentration</b>	Lot-specific (to obtain lot-specific concentration, please enter the lot number in our <a href="#">Concentration and Expiration Lookup</a> or <a href="#">Certificate of Analysis</a> online tools.)
<b>Storage &amp; Handling</b>	The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. <b>Do not freeze.</b>
<b>Application</b>	<a href="#">FC - Quality tested</a>
<b>Recommended Usage</b>	Each lot of this antibody is quality control tested by <a href="#">immunofluorescent staining with flow cytometric analysis</a> . For flow cytometric staining, the suggested use of this reagent is 5 $\mu$ l per million cells in 100 $\mu$ l staining volume or 5 $\mu$ l per 100 $\mu$ l of whole blood.  * Pacific Blue™ has a maximum emission of 455 nm when it is excited at 405 nm. Prior to using Pacific Blue™ conjugate for flow cytometric analysis, please verify your flow cytometer's capability of exciting and detecting the fluorochrome.  Alexa Fluor® and Pacific Blue™ are trademarks of Life Technologies Corporation.  <a href="#">View full statement regarding label licenses</a>
<b>Excitation Laser</b>	Violet Laser (405 nm)
<b>Application Notes</b>	Additional reported (for the relevant formats) application: proteogenomics <sup>1</sup> .
<b>Application References</b>	1. Peterson VM, <i>et al.</i> 2017. <i>Nat. Biotechnol.</i> 35:936. (PG)

### Product Citations

1. Krebs FK, *et al.* 2021. *Cancer Med.* . [PubMed](#)
2. Boyle M, *et al.* 2015. *PLoS Pathog.* 11: 1005041. [PubMed](#)
3. Miles B, *et al.* 2015. *Nat Commun.* 6: 8608. [PubMed](#)

**RRID** AB\_10718638 (BioLegend Cat. No. 351305)  
 AB\_10718639 (BioLegend Cat. No. 351306)

## Antigen Details

<b>Structure</b>	Type I transmembrane glycoprotein, associates with CD132, 60-90 kD
<b>Distribution</b>	Immature B cells through early pre-B stage, thymocytes (except CD4/CD8 double positive thymocytes), peripheral T cells, bone marrow stromal cells
<b>Function</b>	T cell and immature B cell proliferation and development
<b>Ligand/Receptor</b>	IL-7
<b>Cell Type</b>	B cells, T cells, Thymocytes, Tregs
<b>Biology Area</b>	Immunology
<b>Molecular Family</b>	CD Molecules, Cytokine/Chemokine Receptors
<b>Antigen References</b>	<ol style="list-style-type: none"> <li>1. Sudo T, <i>et al.</i> 1993. <i>P. Natl. Acad. Sci. USA</i> 90:9125.</li> <li>2. He YW and Malek TR. 1998. <i>Crit. Rev. Immunol.</i> 18:503.</li> <li>3. Huster KM, <i>et al.</i> 2004. <i>P. Natl. Acad. Sci. USA</i> 101:5610.</li> <li>4. Pillai M, <i>et al.</i> 2004. <i>Leukemia Lymphoma</i> 45:2403.</li> <li>5. Morrissey PJ, <i>et al.</i> 1989. <i>J. Exp. Med.</i> 169:707.</li> <li>6. Liu W, <i>et al.</i> 2006. <i>J. Exp. Med.</i> 203:1701.</li> </ol>
<b>Gene ID</b>	<a href="#">3575</a>

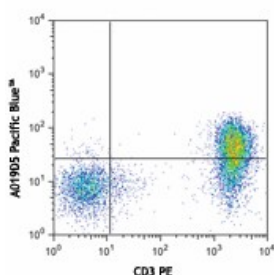
## Related Protocols

[Cell Surface Flow Cytometry Staining Protocol](#)

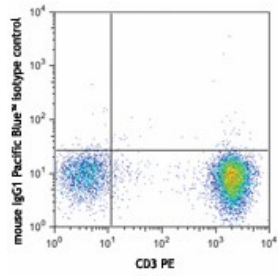
## Other Formats

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

## Product Data



Human peripheral blood lymphocytes were stained with CD3 PE and CD127 (clone A019D5) Pacific Blue™ (top) or mouse IgG1 Pacific Blue™ 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](http://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](http://www.biolegend.com)  
Toll-Free Phone: 1-877-Bio-Legend (246-5343) Phone: (858) 768-5800 Fax: (877) 455-9587