

## PE/Cyanine7 anti-mouse CD127 (IL-7R $\alpha$ ) Antibody

<b>Catalog# / Size</b>	135013 / 25 $\mu$ g 135014 / 100 $\mu$ g
<b>Clone</b>	A7R34
<b>Regulatory Status</b>	RUO
<b>Other Names</b>	IL-7 receptor $\alpha$ chain, IL-7R $\alpha$
<b>Isotype</b>	Rat IgG2a, $\kappa$
<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, thymocytes (except CD4/CD8 double positive thymocytes), peripheral T cells, and bone marrow stromal cells. CD127 has been reported to be an useful marker for identifying memory and effector 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 cells proliferation and development.

### Product Details

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<b>Verified Reactivity</b>	Mouse
<b>Antibody Type</b>	Monoclonal
<b>Host Species</b>	Rat
<b>Immunogen</b>	IL-7R $\alpha$ -IgG1 fusion protein
<b>Formulation</b>	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.
<b>Preparation</b>	The antibody was purified by affinity chromatography, and conjugated with PE/Cyanine7 under optimal conditions.
<b>Concentration</b>	0.2 mg/ml
<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 $\leq 1.0$ $\mu$ g per million cells in 100 $\mu$ l volume. It is recommended that the reagent be titrated for optimal performance for each application.
<b>Excitation Laser</b>	Blue Laser (488 nm) Green Laser (532 nm)/Yellow-Green Laser (561 nm)
<b>Application Notes</b>	A7R34 is able to block clone SB/199 binding to IL-7R.
<b>Additional Product Notes</b>	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 <a href="#">Technical Service</a> if you have any questions.
<b>Application 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. Hashi H, <i>et al.</i> 2001. <i>J. Immunol.</i> 166:3702.</li> <li>3. Taylor R, <i>et al.</i> 2007. <i>J. Immunol.</i> 178:5659.</li> <li>4. Mazzon C, <i>et al.</i> 2011. <i>Blood.</i> 118:2733. <a href="#">PubMed</a></li> <li>5. Jin J, <i>et al.</i> 2011. <i>J. Immunol.</i> doi:10.4049/jimmunol.1001238. <a href="#">PubMed</a></li> </ol>
<b>(PubMed link indicates BioLegend citation)</b>	
<b>Product Citations</b>	<ol style="list-style-type: none"> <li>1. Hutter K, <i>et al.</i> 2022. <i>Front Immunol.</i> 13:967914. <a href="#">PubMed</a></li> <li>2. Zheng X, <i>et al.</i> 2019. <i>PLoS Pathog.</i> 15:e1008036. <a href="#">PubMed</a></li> </ol>

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**RRID** AB\_1937266 (BioLegend Cat. No. 135013)  
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## Antigen Details

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<b>Structure</b>	Type I transmembrane glycoprotein, associate 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
<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. Okuno Y, <i>et al.</i> 2001. <i>P. Natl. Acad. Sci. USA</i> 99:6246.</li> <li>3. Pillai M, <i>et al.</i> 2004. <i>Leukemia Lymphoma</i> 45:2403.</li> </ol>
<b>Gene ID</b>	<a href="#">16197</a>

## Related Protocols

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[Cell Surface Flow Cytometry Staining Protocol](#)

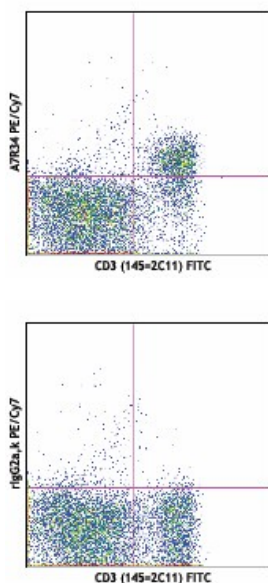
## Other Formats

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Purified anti-mouse CD127 (IL-7R $\alpha$ ), FITC anti-mouse CD127 (IL-7R $\alpha$ ), PE anti-mouse CD127 (IL-7R $\alpha$ ), APC anti-mouse CD127 (IL-7R $\alpha$ ), PE/Cyanine7 anti-mouse CD127 (IL-7R $\alpha$ ), PE/Cyanine5 anti-mouse CD127 (IL-7R $\alpha$ ), Alexa Fluor® 488 anti-mouse CD127 (IL-7R $\alpha$ ), Alexa Fluor® 647 anti-mouse CD127 (IL-7R $\alpha$ ), PerCP/Cyanine5.5 anti-mouse CD127 (IL-7R $\alpha$ ), Biotin anti-mouse CD127 (IL-7R $\alpha$ ), Brilliant Violet 421™ anti-mouse CD127 (IL-7R $\alpha$ ), Brilliant Violet 605™ anti-mouse CD127 (IL-7R $\alpha$ ), Purified anti-mouse CD127 (IL-7R $\alpha$ ) (Maxpar® Ready), PE/Dazzle™ 594 anti-mouse CD127 (IL-7R $\alpha$ ), Brilliant Violet 510™ anti-mouse CD127 (IL-7R $\alpha$ ), Brilliant Violet 711™ anti-mouse CD127 (IL-7R $\alpha$ ), Brilliant Violet 785™ anti-mouse CD127 (IL-7R $\alpha$ ), APC/Cyanine7 anti-mouse CD127 (IL-7R $\alpha$ ), Brilliant Violet 650™ anti-mouse CD127 (IL-7R $\alpha$ ), TotalSeq™-A0198 anti-mouse CD127 (IL-7R $\alpha$ ), TotalSeq™-C0198 anti-mouse CD127 (IL-7R $\alpha$ ), Ultra-LEAF™ Purified anti-mouse CD127 (IL-7R $\alpha$ ), TotalSeq™-B0198 anti-mouse CD127 (IL-7R $\alpha$ )

## Product Data

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C57BL/6 mouse splenocytes stained with CD3 (145-2C11) FITC and A7R34 PE/Cyanine7 (top) or rat IgG2a,  $\kappa$  PE/Cyanine7 isotype control (bottom)

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