

## PerCP/Cyanine5.5 anti-human CD123 Antibody

<b>Catalog# / Size</b>	306015 / 25 tests 306016 / 100 tests
<b>Clone</b>	6H6
<b>Regulatory Status</b>	RUO
<b>Other Names</b>	IL-3R $\alpha$ , IL-3 Receptor alpha
<b>Isotype</b>	Mouse IgG1, $\kappa$
<b>Description</b>	CD123 is the 70 kD transmembrane $\alpha$ chain of the IL-3 receptor. Alone, CD123 binds IL-3 with low affinity; when CD123 associates with CDw131 (common $\beta$ chain), it binds IL-3 with high affinity. CD123 does not transduce intracellular signals upon binding IL-3 and requires the $\beta$ chain for this function. CD123 is expressed by myeloid precursors, macrophages, dendritic cells, mast cells, basophils, megakaryocytes, and some B cells.

### Product Details

---

<b>Verified Reactivity</b>	Human
<b>Reported Reactivity</b>	Rhesus
<b>Antibody Type</b>	Monoclonal
<b>Host Species</b>	Mouse
<b>Immunogen</b>	Human IL-3R $\alpha$ transfected COS cells.
<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 PerCP/Cyanine5.5 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.  * PerCP/Cyanine5.5 has a maximum absorption of 482 nm and a maximum emission of 690 nm.
<b>Application Notes</b>	Clone 6H6 does not inhibit IL-3 binding to low- or high-affinity IL-3Rs. Additional reported applications (for the relevant formats) include: Western blotting <sup>1</sup> , immunoprecipitation <sup>1</sup> , and immunohistochemical staining of acetone-fixed frozen sections <sup>2</sup> and also paraformaldehyde fixed paraffin embedded tissue <sup>7</sup> .
<b>Additional Product Notes</b>	BioLegend is in the process of converting the name PerCP/Cy5.5 to PerCP/Cyanine5.5. The dye molecule remains the same, so you should expect the same quality and performance from our PerCP/Cyanine5.5 products. Contact <a href="#">Technical Service</a> if you have any questions.
<b>Application References</b>	<ol style="list-style-type: none"> <li>1. Sun Q, <i>et al.</i> 1996. <i>Blood</i> 87:83. (IP, WB)</li> <li>2. Herling M, <i>et al.</i> 2003. <i>Blood</i> 101:5007. (IHC)</li> <li>3. Charles N, <i>et al.</i> 2010. <i>Nat. Med.</i> 16:701. (FC) <a href="#">PubMed</a></li> <li>4. Martin-Gayo E, <i>et al.</i> 2010. <i>Blood</i> 115:5366. <a href="#">PubMed</a></li> <li>5. Chen SC, <i>et al.</i> 2010. <i>Arch Dermatol Res.</i> 302:113. <a href="#">PubMed</a></li> <li>6. Liu Y, <i>et al.</i> 2012. <i>Food Chem Toxicol.</i> 50:1920. <a href="#">PubMed</a></li> <li>7. Peduzzi E, <i>et al.</i> 2007. <i>J. Invest. Dermatol.</i> 127:638. (IHC)</li> </ol>
<b>(PubMed link indicates BioLegend citation)</b>	

## Product Citations

1. Rosa TLSA, *et al.* 2022. *Front Med (Lausanne)*. 9:899998. [PubMed](#)
2. Gupta R, *et al.* 2022. *Front Immunol*. 13:886442. [PubMed](#)
3. Mashiko S, *et al.* 2015. *J Allergy Clin Immunol*. 136: 351-359. [PubMed](#)
4. Laing AG, *et al.* 2020. *Nat Med*. 26:1623. [PubMed](#)
5. Woolsey C *et al.* 2019. *Cell Rep*. 28(12):3032-3046 . [PubMed](#)
6. Bourdely P, *et al.* 2020. *Immunity*. 53(2):335-352. [PubMed](#)
7. Jankeel A, *et al.* 2020. *J Virol*. :94. [PubMed](#)
8. Gu C, *et al.* 2021. *Front Immunol*. 12:678036. [PubMed](#)
9. Sureshchandra S, *et al.* 2021. *iScience*. 24:102690. [PubMed](#)
10. Sureshchandra S, *et al.* 2022. *Cell Rep*. 39:110938. [PubMed](#)
11. Manuel S, *et al.* 2013. *AIDS Res Hum Retroviruses*. 29:1273. [PubMed](#)
12. Morell M, *et al.* 2022. *EBioMedicine*. 76:103808. [PubMed](#)
13. Li M, *et al.* 2020. *Nat Commun*. 4051:11. [PubMed](#)

## RRID

AB\_2124258 (BioLegend Cat. No. 306015)  
AB\_2264693 (BioLegend Cat. No. 306016)

## Antigen Details

<b>Structure</b>	Ig superfamily, type I transmembrane glycoprotein, associates with CDw131, 70 kD
<b>Distribution</b>	Myeloid precursors, basophils, mast cells, macrophages, dendritic cells, megakaryocytes, subset of lymphocytes
<b>Function</b>	Hematopoietic cell proliferation, differentiation
<b>Ligand/Receptor</b>	IL-3
<b>Cell Type</b>	Basophils, Dendritic cells, Hematopoietic stem and progenitors, Lymphocytes, Macrophages, Mast cells, Megakaryocytes
<b>Biology Area</b>	Immunology
<b>Molecular Family</b>	CD Molecules, Cytokine/Chemokine Receptors
<b>Antigen References</b>	1. Miyajima A, <i>et al.</i> 1993. <i>Blood</i> 82:1960.
<b>Gene ID</b>	<a href="#">3563</a>

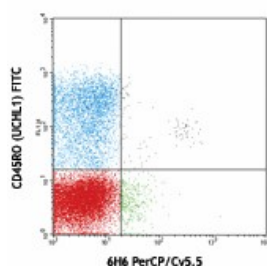
## Related Protocols

[Cell Surface Flow Cytometry Staining Protocol](#)

## Other Formats

Biotin anti-human CD123, PE anti-human CD123, Purified anti-human CD123, PE/Cyanine5 anti-human CD123, PE/Cyanine7 anti-human CD123, APC anti-human CD123, FITC anti-human CD123, PerCP/Cyanine5.5 anti-human CD123, Brilliant Violet 421™ anti-human CD123, Brilliant Violet 650™ anti-human CD123, Brilliant Violet 510™ anti-human CD123, Alexa Fluor® 647 anti-human CD123, Brilliant Violet 605™ anti-human CD123, Purified anti-human CD123 (Maxpar® Ready), Brilliant Violet 711™ anti-human CD123, Brilliant Violet 785™ anti-human CD123, PE/Dazzle™ 594 anti-human CD123, Alexa Fluor® 488 anti-human CD123, TotalSeq™-A0064 anti-human CD123, Alexa Fluor® 700 anti-human CD123, APC/Fire™ 750 anti-human CD123, Pacific Blue™ anti-human CD123, TotalSeq™-C0064 anti-human CD123, TotalSeq™-B0064 anti-human CD123, TotalSeq™-D0064 anti-human CD123, PerCP anti-human CD123, GMP PE/Cyanine7 anti-human CD123, APC/Fire™ 810 anti-human CD123 Antibody

## Product Data



Human peripheral blood lymphocytes stained with 6H6 PerCP/Cyanine5.5 and UCHL1 FITC

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.

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