

PE anti-human CD123 Antibody

Catalog# / Size	306005 / 25 tests 306006 / 100 tests
Clone	6H6
Regulatory Status	RUO
Other Names	IL-3R α , IL-3 Receptor alpha
Isotype	Mouse IgG1, κ
Description	CD123 is the 70 kD transmembrane α chain of the IL-3 receptor. Alone, CD123 binds IL-3 with low affinity; when CD123 associates with CDw131 (common β chain), it binds IL-3 with high affinity. CD123 does not transduce intracellular signals upon binding IL-3 and requires the β chain for this function. CD123 is expressed by myeloid precursors, macrophages, dendritic cells, mast cells, basophils, megakaryocytes, and some B cells.

Product Details

Verified Reactivity	Human
Reported Reactivity	Rhesus
Antibody Type	Monoclonal
Host Species	Mouse
Immunogen	Human IL-3R α transfected COS cells.
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 PE 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.
Excitation Laser	Blue Laser (488 nm) Green Laser (532 nm)/Yellow-Green Laser (561 nm)
Application Notes	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 ¹ , immunoprecipitation ¹ , and immunohistochemical staining of acetone-fixed frozen sections ² and also paraformaldehyde fixed paraffin embedded tissue ⁷ .
Application References	<ol style="list-style-type: none"> 1. Sun Q, <i>et al.</i> 1996. <i>Blood</i> 87:83. (IP, WB) 2. Herling M, <i>et al.</i> 2003. <i>Blood</i> 101:5007. (IHC) 3. Charles N, <i>et al.</i> 2010. <i>Nat. Med.</i> 16:701. (FC) PubMed 4. Martin-Gayo E, <i>et al.</i> 2010. <i>Blood</i> 115:5366. PubMed 5. Chen SC, <i>et al.</i> 2010. <i>Arch Dermatol Res.</i> 302:113. PubMed 6. Liu Y, <i>et al.</i> 2012. <i>Food Chem Toxicol.</i> 50:1920. PubMed 7. Peduzzi E, <i>et al.</i> 2007. <i>J. Invest. Dermatol.</i> 127:638. (IHC)
Product Citations	<ol style="list-style-type: none"> 1. Woo MS, <i>et al.</i> 2021. <i>iScience.</i> 24(7):102752. PubMed 2. Zaro BW, <i>et al.</i> 2019. <i>J Immunol.</i> 202:2737. PubMed

(PubMed link indicates BioLegend citation)

3. Luchsinger LL, *et al.* 2020. *Cell Stem Cell*. 25(2):225-240. [PubMed](#)
4. Randrianarison-Huetz V, *et al.* 2010. *Blood*. 115:2784. [PubMed](#)
5. Han L, *et al.* 2012. *PLoS One*. 4:e7989. [PubMed](#)
6. Jarosch S, *et al.* 2022. *STAR Protoc*. 3:101374. [PubMed](#)
7. Kim ST, *et al.* 2022. *Nat Commun*. 13:1970. [PubMed](#)
8. Jarosch S, *et al.* 2021. *Cell Rep Methods*. 1:100104. [PubMed](#)
9. Warmuth S, *et al.* 2022. *Oncoimmunology*. 10:2004661. [PubMed](#)
10. Sefik E, *et al.* 2021. *Nat Biotechnol*. . [PubMed](#)
11. Houtsma R, *et al.* 2021. *STAR Protoc*. 2:100864. [PubMed](#)
12. Le J, *et al.* 2020. *Immunity*. 52(6):1105-1118.e9. [PubMed](#)
13. Felce JH, *et al.* 2018. *Sci Signal*. 11:eaat0756. [PubMed](#)
14. Kerdidani D, *et al.* 2022. *J Exp Med*. 219:. [PubMed](#)
15. Li M, *et al.* 2020. *Nat Commun*. 4051:11. [PubMed](#)
16. Leylek R, *et al.* 2020. *Cell Rep*. 32:108180. [PubMed](#)

RRID AB_314579 (BioLegend Cat. No. 306005)
 AB_314580 (BioLegend Cat. No. 306006)

Antigen Details

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

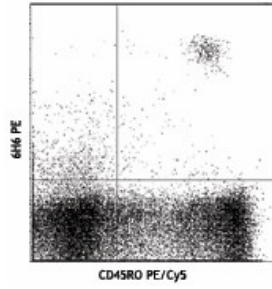
Related Protocols

[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 PE and CD45RO
PE/Cy5

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