

## Alexa Fluor<sup>®</sup> 700 anti-human CD123 Antibody

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|--------------------------|--|
| <b>Catalog# / Size</b>   | 306039 / 25 tests<br>306040 / 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

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|-------------------------------|--|
| <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 Alexa Fluor <sup>®</sup> 700 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.<br><br>* Alexa Fluor <sup>®</sup> 700 has a maximum emission of 719 nm when it is excited at 633 nm / 635 nm. Prior to using Alexa Fluor <sup>®</sup> 700 conjugate for flow cytometric analysis, please verify your flow cytometer's capability of exciting and detecting the fluorochrome.<br><br>Alexa Fluor <sup>®</sup> and Pacific Blue™ are trademarks of Life Technologies Corporation.<br><br><a href="#">View full statement regarding label licenses</a> |
| <b>Excitation Laser</b>       | Red Laser (633 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> .  |

### Application References

(PubMed link indicates BioLegend citation)

1. Sun Q, *et al.* 1996. *Blood* 87:83. (IP, WB)
2. Herling M, *et al.* 2003. *Blood* 101:5007. (IHC)
3. Charles N, *et al.* 2010. *Nat. Med.* 16:701. (FC) [PubMed](#)
4. Martin-Gayo E, *et al.* 2010. *Blood* 115:5366. [PubMed](#)

5. Chen SC, et al. 2010. *Arch Dermatol Res*. 302:113. [PubMed](#)
6. Liu Y, et al. 2012. *Food Chem Toxicol*. 50:1920. [PubMed](#)
7. Peduzzi E, et al. 2007. *J. Invest. Dermatol*. 127:638. (IHC)

**RRID** AB\_2750160 (BioLegend Cat. No. 306039)  
 AB\_2750161 (BioLegend Cat. No. 306040)

## 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, et al. 1993. <i>Blood</i> 82:1960.  |
| <b>Gene ID</b>            | <a href="#">3563</a>   |

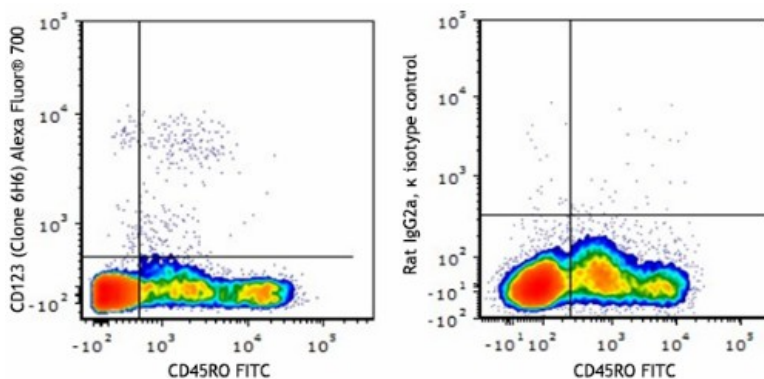
## Related Protocols

[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 605™ 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 lysed whole blood was stained with CD45RO FITC and CD123 (clone 6H6) Alexa Fluor® 700 (left) or CD45RO FITC and Mouse IgG1, κ Alexa Fluor® 700 isotype control (right).

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