

**Brilliant Violet 510™ anti-human CD123**

**Catalog # / Size:** 2130105 / 25 tests  
2130110 / 100 tests

**Clone:** 6H6

**Isotype:** Mouse IgG1,  $\kappa$

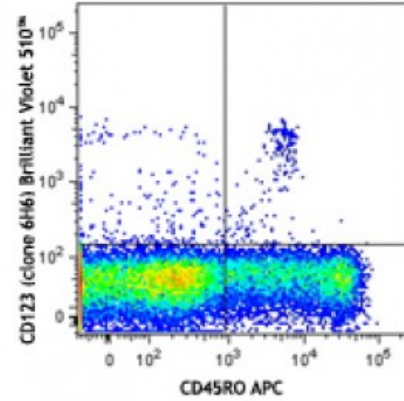
**Immunogen:** Human IL-3R $\alpha$  transfected COS cells.

**Reactivity:** Human

**Preparation:** The antibody was purified by affinity chromatography and conjugated with Brilliant Violet 510™ under optimal conditions. The solution is free of unconjugated Brilliant Violet 510™ and unconjugated antibody.

**Formulation:** Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA).

**Concentration:** Lot-specific

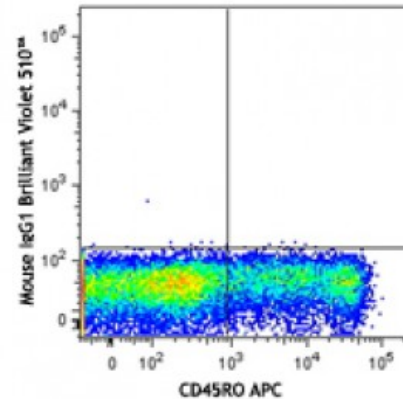


Human peripheral blood lymphocytes were stained with CD45RO APC and CD123 (clone 6H6) Brilliant Violet 510™ (top) or mouse IgG1 Brilliant Violet 510™ isotype control (bottom).

**Applications:**

**Applications:** Flow Cytometry

**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  $\leq 5$  microL per million cells or 5 microL per 100 microL of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.



Brilliant Violet 510™ excites at 405 nm and emits at 510 nm. The bandpass filter 510/50 nm is recommended for detection, although filter optimization may be required depending on other fluorophores used. **Be sure to verify that your cytometer configuration and software setup are appropriate for detecting this channel.** Refer to your instrument manual or manufacturer for support. Brilliant Violet 510™ is a trademark of Sirigen Group Ltd.

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purposes only. This product may not be resold or incorporated in any manner into another product for resale. Any use for therapeutics or diagnostics is strictly prohibited. This product is covered by U.S. Patent(s), pending patent applications and foreign equivalents.

**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<sup>1</sup>, immunoprecipitation<sup>1</sup>, and immunohistochemical staining of acetone-fixed frozen sections<sup>2</sup>.

**Application References:**

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. Lee J, *et al.* 2015. *J Exp Med.* 212:385. [PubMed](#)
6. Breton G, *et al.* 2015. *J Exp Med.* 212:401. [PubMed](#)

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**Description:** 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.

**Antigen References:**

1. Miyajima A, *et al.* 1993. *Blood* 82:1960.