

**Brilliant Violet 650™ anti-human CD123**

**Catalog # /** 2130100 / 100 tests  
**Size:** 2130095 / 25 tests

**Clone:** 6H6

**Isotype:** Mouse IgG1, κ

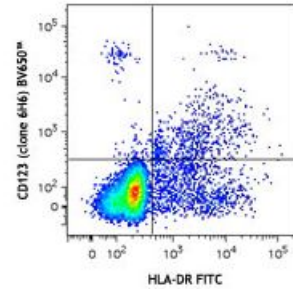
**Immunogen:** Human IL-3Rα transfected COS cells.

**Reactivity:** Human

**Preparation:** The antibody was purified by affinity chromatography and conjugated with Brilliant Violet 650™ under optimal conditions. The solution is free of unconjugated Brilliant Violet 650™ and unconjugated antibody.

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

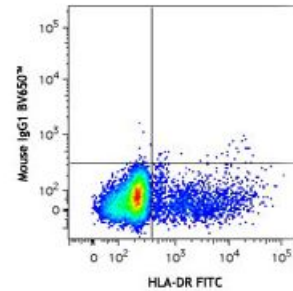
**Concentration:** Lot-specific



Human peripheral blood leukocytes were stained with HLA-DR FITC and CD123 (clone 6H6) Brilliant Violet 650™ (top) or mouse IgG1 Brilliant Violet 650™ 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 650™ excites at 405 nm and emits at 645 nm. The bandpass filter 660/20 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 650™ is a trademark of Sirigen Group Ltd.

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**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](#)

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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.