

**Brilliant Violet 421™ anti-human CD123**

**Catalog # / Size:** 2130090 / 100 tests  
2130085 / 25 tests

**Clone:** 6H6

**Isotype:** Mouse IgG1, κ

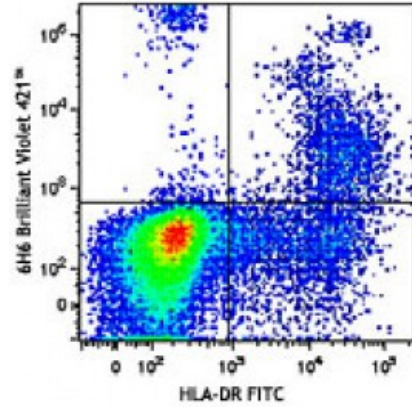
**Immunogen:** Human IL-3Rα transfected COS cells.

**Reactivity:** Human

**Preparation:** The antibody was purified by affinity chromatography and conjugated with Brilliant Violet 421™ under optimal conditions. The solution is free of unconjugated Brilliant Violet 421™ and unconjugated antibody.

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

**Concentration:** Lot-specific

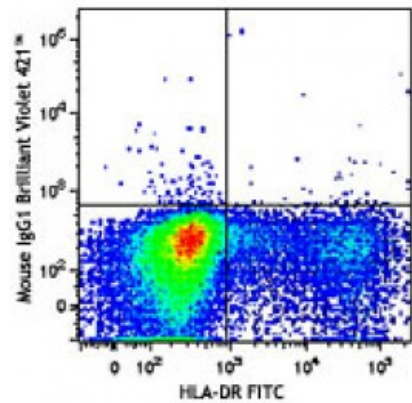


Human peripheral blood leukocytes were stained with HLA-DR FITC and CD123 (clone 6H6) Brilliant Violet 421™ (top) or mouse IgG1 Brilliant Violet 421™ isotype control (bottom). Data shown was gated on lymphocyte population.

**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 ≤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 421™ excites at 405 nm and emits at 421 nm. The standard bandpass filter 450/50 nm is recommended for detection. Brilliant Violet 421™ is a trademark of Sirigen Group Ltd.

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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](#)

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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.