SONY

Product Data Sheet

Brilliant Violet 421™ anti-human CD123

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

Clone: 6H6

Isotype: Mouse IgG1, κ

Immunogen: Human IL-3Rα transfected COS cells.

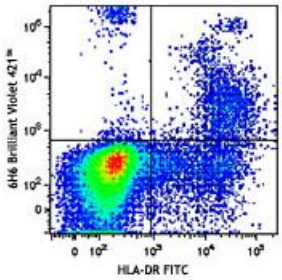
Reactivity: Human, Other

Preparation: The antibody was purified by affinity chromatography and conjugated with Brilliant Violet 421™ under optimal conditions.

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

Workshop Number: VI CD80.1

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.

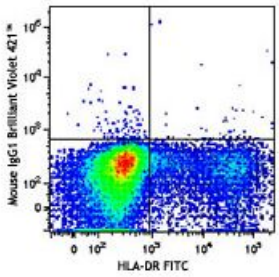
Applications:

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 µl per million cells or 5 µl per 100 µl 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.

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 blotting1, immunoprecipitation1, and immunohistochemical staining of acetone-fixed frozen sections2.



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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. 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)

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.

Antigen References:

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

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