

TECHNICAL DATA SHEET

CyFlow™ CD123 PE-Cy7 Anti-Hu; Clone 6H6

REF BF349525

For Research Use Only.

Not for use in diagnostic or therapeutic procedures.

Specifications

Antigen	CD123
Alternative Names	IL-3Ra, IL3R
Clone	6H6
Clonality	monoclonal
Format	PE-Cy7
Host / Isotype	Mouse / IgG1
Species Reactivity	Human
Negative Species Reactivity	—
Quantity	100 tests
Immunogen	IL3 receptor α chain expressed on the surface of transiently transfected COS cells

Contact Information:

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Specificity

The mouse monoclonal antibody 6H6 recognizes CD123 antigen, a 60-70 kDa transmembrane protein expressed by myeloid precursors, megakaryocytes, macrophages, dendritic cells, mast cells, basophils, and some B cells. This antibody does not inhibit IL-3 binding to its receptor.

Application

The reagent is designed for Flow Cytometry analysis of human blood cells. Recommended usage is 4 µl reagent / 100 µl of whole blood or 10⁶ cells in a suspension. The content of a vial (0.4 ml) is sufficient for 100 tests.

Other usages may be determined from the scientific literature.

Storage Buffer

The reagent is provided in stabilizing phosphate buffered saline (PBS) solution, pH ≈7.4, containing 0.1% (w/v) sodium azide.

Storage and Stability

Storage	Avoid prolonged exposure to light. Store in the dark at 2-8°C. Do not freeze.
Stability	Do not use after expiration date stamped on vial label.

Background Information

CD123 is the α chain of interleukin 3 receptor (IL-3R α). This subunit heterodimerizes with the interleukin 3 receptor β chain (CD131), which is shared with other receptors. CD123 interacts with IL-3 specifically, but with low affinity, and association with the β subunit confers high affinity binding to the receptor heterodimer. Both chains are required for signaling, but receptor activation and signal transduction depend on IL-3 binding to CD123 as the initial step.

References

- Sun Q, Woodcock JM, Rapoport A, Stomski FC, Korpelainen EI, Bagley CJ, Goodall GJ, Smith WB, Gamble JR, Vadas MA, Lopez AF: Monoclonal antibody 7G3 recognizes the N-terminal domain of the human interleukin-3 (IL-3) receptor alpha-chain and functions as a specific IL-3 receptor antagonist. Blood. 1996 Jan 1; 87(1):83-92. < PMID: 8547680 >

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- Herling M, Teitell MA, Shen RR, Medeiros LJ, Jones D: TCL1 expression in plasmacytoid dendritic cells (DC2s) and the related CD4+ CD56+ blastic tumors of skin. Blood. 2003 Jun 15; 101(12):5007-9. < PMID: 12576313 >
- Martín-Gayo E, Sierra-Filardi E, Corbí AL, Toribio ML: Plasmacytoid dendritic cells resident in human thymus drive natural Treg cell development. Blood. 2010 Jul 1; 115(26):5366-75. < PMID: 20357241 >

The Safety Data Sheet for this product is available at www.sysmex-partec.com/services.

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