Anti-Human CD123 (IL-3Rα) Antibody, Clone 6H6, PE

Antibodies

Mouse monoclonal IgG1 antibody against human, rhesus, sooty mangabey CD123 (IL-3Rα), PE-conjugated

Catalog	#60110PE	100 Tests	5 µL/test
	#60110PE.1	25 Tests	5 µL/test

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TOLL FREE PHONE 1 800 667 0322 • PHONE +1 604 877 0713
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Product Description

The 6H6 antibody reacts with human CD123 (IL-3 receptor subunit α), an ~70 kDa type I transmembrane glycoprotein belonging to the type I cytokine receptor family (type 5 subfamily) and the immunoglobulin (Ig) superfamily. CD123 constitutes the ligand-binding α chain of the heterodimeric IL-3 receptor. CD123 binds IL-3 with low affinity per se, but when associated with CD131 (the signal-transducing β chain of the receptor), high-affinity binding of IL-3 is observed. CD123 is expressed by hematopoietic progenitor cells, endothelial cells, basophils, eosinophils, mast cells, monocytes, macrophages, dendritic cells, megakaryocytes, a subset of B cells, and by neutrophils if cultured in the presence of granulocyte-macrophage colony-stimulating factor (GM-CSF). IL-3 binding to CD123 stimulates proliferation, differentiation, and viability of hematopoietic cells. CD123 is highly expressed in malignancies such as acute leukemia. The 6H6 antibody does not inhibit binding of IL-3 to either CD123 or the IL-3 receptor.

Target Antigen Name:	CD123 (IL-3Rα)
Alternative Names:	hIL-3Ra, IL3R, IL3RAX, IL3RAY, IL3RX, IL3RY, IL-3Ra, IL-3 receptor alpha SP2 isoform, Interleukin-3 Receptor alpha, MGC34174
Gene ID:	3563
Species Reactivity:	Human, Rhesus, Sooty Mangabey
Host Species:	Mouse (BALB/c)
Clonality:	Monoclonal
Clone:	6H6
Isotype:	IgG1, kappa
Immunogen:	COS cells transfected with a cDNA encoding the human IL-3Rα chain
Conjugate:	PE (Phycoerythrin)

Applications

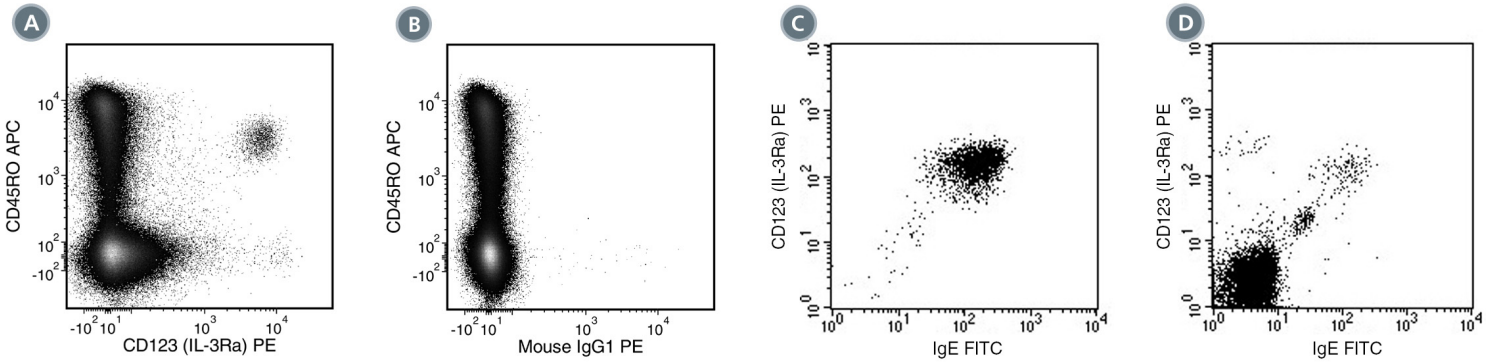
Verified:	FC
Reported:	FC
Special Applications:	This antibody clone has been verified for purity assessments of cells isolated with EasySep™ kits, including EasySep™ Human Plasmacytoid DC Enrichment Kit (Catalog #19062) and EasySep™ Human Basophil Enrichment Kit (Catalog #19069).

Abbreviations: CellSep: Cell separation; ChIP: Chromatin immunoprecipitation; FA: Functional assay; FACS: Fluorescence-activated cell sorting; FC: Flow cytometry; ICC: Immunocytochemistry; IF: Immunofluorescence microscopy; IHC: Immunohistochemistry; IP: Immunoprecipitation; RIA: Radioimmunoassay; WB: Western blotting

Properties

Formulation:	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) bovine serum albumin
Purification:	The antibody was purified by affinity chromatography and conjugated with PE under optimal conditions. The solution is free of unconjugated PE and unconjugated antibody.
Stability and Storage:	Product stable at 2 - 8°C when stored undiluted. Do not freeze. Protect product from prolonged exposure to light. For product expiry date, please contact techsupport@stemcell.com.
Directions for Use:	For flow cytometry, the suggested use of this antibody is ≤ 5 µL per 1 x 10^6 cells in 100 µL. It is recommended that the antibody be titrated for optimal performance for each application.

Data



(A) Flow cytometry analysis of human peripheral blood mononuclear cells (PBMCs; gated on lymphocytes) labeled with Anti-Human CD123 (IL-3Rα) Antibody, Clone 6H6, PE and Anti-Human CD45RO Antibody, Clone UCHL1, APC (Catalog #60097AZ).
(B) Flow cytometry analysis of human PBMCs (gated on lymphocytes) labeled with Mouse IgG1, kappa Isotype Control Antibody, Clone MOPC-21, PE (Catalog #60070PE) and Anti-Human CD45RO Antibody, Clone UCHL1, APC.
(C) Flow cytometry analysis of human whole blood nucleated cells (gated on CD45+ cells) processed with the EasySep™ Human Basophil Enrichment Kit and labeled with Anti-Human CD123 (IL-3Rα) Antibody, Clone 6H6, PE and an anti-IgE antibody, FITC. Labeling of the Start cells prior to cell isolation is shown (D).

Related Products

For a complete list of antibodies, including other conjugates, sizes and clones, as well as related products available from STEMCELL Technologies, please visit our website at www.stemcell.com/antibodies or contact us at techsupport@stemcell.com.

References

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