

Anti-Human CD5 Antibody, Clone UCHT2, Biotin



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Antibodies

Mouse monoclonal IgG1 antibody
against human, rhesus, cynomolgus
CD5, biotin-conjugated

Catalog #60082BT

100 ug 0.5 mg/mL

FOR RESEARCH USE ONLY. NOT INTENDED FOR HUMAN OR ANIMAL DIAGNOSTIC OR THERAPEUTIC USES.

Product Description

The UCHT2 antibody reacts with CD5, an ~67 kDa single-chain type I glycoprotein and member of the scavenger receptor superfamily, which is constitutively expressed on thymocytes, T cells, B cell subsets, peripheral blood dendritic cells and some leukemia and lymphoma cells, including chronic B lymphocytic leukemia (B-CLL) cells. CD5 is expressed at low levels on thymocytes and at high density on mature T cells. Putative ligands include CD5L and CD72. CD5 modulates T and B cell receptor signaling, thymocyte maturation, and T cell/B cell interactions via its physical and functional associations with the T cell receptor/CD3 complex and the B-cell receptor. Studies with CD5 knockout mice indicate that CD5 negatively regulates antigen receptor-mediated signaling in thymocytes and mature T cells. The UCHT2 antibody binds to epitope 2 located in the extracellular domain of CD5.

Target Antigen Name:	CD5
Alternative Names:	Leu1, Leu-1, Ly-1, Lymphocyte Antigen T1, T1, Tp67
Gene ID:	921
Species Reactivity:	Human, Rhesus, Cynomolgus, Capuchin Monkey, Chimpanzee, Common Marmoset, Owl Monkey
Host Species:	Mouse (BALB/c)
Clonality:	Monoclonal
Clone:	UCHT2
Isotype:	IgG1, kappa
Immunogen:	Human thymocytes followed by Sézary T cells
Conjugate:	Biotin

Applications

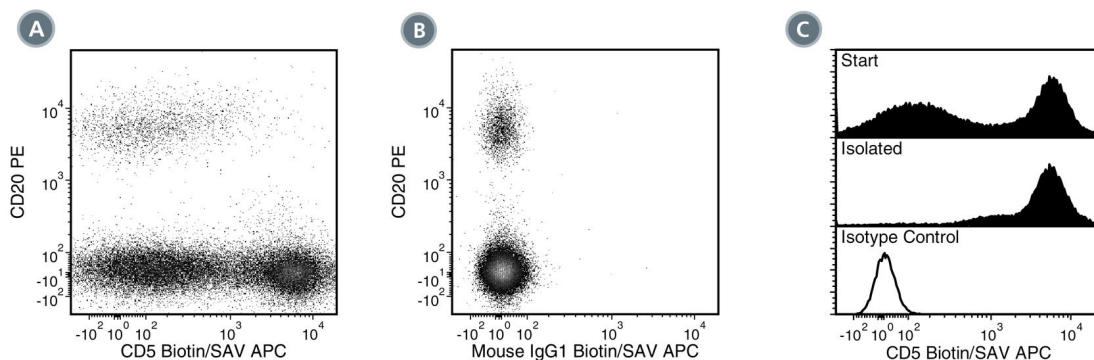
Verified:	FC
Reported:	FC, IHC
Special Applications:	This antibody clone has been verified for purity assessments of cells isolated with EasySep™ kits, including EasySep™ HLA Whole Blood CD3 Positive Selection Kit (Catalog #18081HLA) and EasySep™ HLA CD3 Positive Selection Kit (Catalog #18051HLA).

Abbreviations: CellSep: Cell separation; ChIP: Chromatin immunoprecipitation; FA: Functional assay; FC: Flow cytometry; ICC: Immunocytochemistry; IF: Immunofluorescence microscopy; IHC: Immunohistochemistry; IP: Immunoprecipitation; WB: Western blotting

Properties

Formulation:	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide
Purification:	The antibody was purified by affinity chromatography and conjugated with biotin under optimal conditions. The solution is free of unconjugated biotin.
Stability and Storage:	Product stable at 2 - 8°C when stored undiluted. Do not freeze. For product expiry date, please contact techsupport@stemcell.com .
Directions for Use:	For flow cytometry the suggested use of this antibody is $\leq 0.5 \mu\text{g}$ per 1×10^6 cells in 100 μL volume. It is recommended that the antibody be titrated for optimal performance for each application.

Data



(A) Flow cytometry analysis of human buffy coat nucleated cells labeled with Anti-Human CD5 Antibody, Clone UCHT2, Biotin followed by streptavidin (SAV) APC and Anti-Human CD20 Antibody, Clone 2H7, PE (Catalog #60008PE).
 (B) Flow cytometry analysis of human buffy coat nucleated cells labeled with a mouse IgG1, kappa biotin isotype control antibody followed by streptavidin (SAV) APC and Anti-Human CD20 Antibody, Clone 2H7, PE.
 (C) Flow cytometry analysis of human buffy coat nucleated cells processed with the EasySep™ HLA CD3 Positive Selection Kit and labeled with Anti-Human CD5 Antibody, Clone UCHT2, Biotin followed by streptavidin (SAV) APC. Histograms show labeling of buffy coat nucleated cells (Start) and isolated cells (Isolated). Labeling of start cells with a mouse IgG1, kappa biotin isotype control antibody followed by SAV APC is shown (open histogram).

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.

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