	Anti-Human CD5 Antibody, Clone UCHT2, PerCP-Cy5.5		STENCELL™ T E C H N O L O G I E S
Antibodies	Mouse monoclonal IgG1 antibody against human, rhesus, cynomolgus CD5, PerCP-Cy5.5-conjugated		Scientists Helping Scientists™   WWW.STEMCELL.COM
Catalog #60082PS #60082PS.1	100 Tests 25 Tests	5 μL/test 5 μL/test	INFO@STEMCELL.COM • TECHSUPPORT@STEMCELL.COM FOR GLOBAL CONTACT DETAILS VISIT OUR WEBSITE

## **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:	lgG1, kappa		
Immunogen:	Human thymocytes followed by Sézary T cells		
Conjugate:	PerCP-Cy5.5		

## Applications

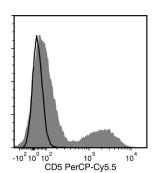
Verified:	FC
Reported:	FC
Special Applications:	This antibody clone has been verified for purity assessments of cells isolated with EasySep™ kits, including EasySep™ HLA Whole Blood CD3 Positive Selection Kit (Catalog #18081HLA) and EasySep™ HLA CD3 Positive Selection Kit (Catalog #18051HLA).

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

Properties	
Formulation:	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.1% gelatin
Purification:	The antibody was purified by affinity chromatography and conjugated with PerCP-Cy5.5 under optimal conditions. The solution is free of unconjugated PerCP-Cy5.5.
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 $\leq$ 5 µL (0.25 µg) per 1 x 10^6 cells in 100 µL volume. It is recommended that the antibody be titrated for optimal performance for each application.



Data



Flow cytometry analysis of human peripheral blood mononuclear cells (PBMCs) labeled with Anti-Human CD5 Antibody, Clone UCHT2, PerCP-Cy5.5 (filled histogram) or a mouse IgG1, kappa isotype control antibody, PerCP-Cy5.5 (solid line 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.

## References

1. Tabbekh M et al. (2013) T-cell modulatory properties of CD5 and its role in antitumor immune responses. Oncoimmunology 2(1): e22841.

2. Kap YS et al. (2009) A monoclonal antibody selection for immunohistochemical examination of lymphoid tissues from non-human primates. J Histochem Cytochem 57(12): 1159–67. (IHC)

3. Renaudineau Y et al. (2005) An alternative exon 1 of the CD5 gene regulates CD5 expression in human B lymphocytes. Blood 106(8): 2781–9. (FC, IHC, WB)

4. Ozwara H et al. (1997) Flow cytometric analysis on reactivity of human T lymphocyte-specific and cytokine-receptor-specific antibodies with peripheral blood mononuclear cells of chimpanzee (Pan troglodytes), rhesus macaque (Macaca mulatta), and squirrel monkey (Saimiri sciureus). J Med Primatol 26(3): 164–71. (FC)

5. Porter JC & Hogg N. (1997) Integrin cross talk: activation of lymphocyte function-associated antigen-1 on human T cells alters alpha4beta1- and alpha5beta1-mediated function. J Cell Biol 138(6): 1437–47. (Cell attachment assays)

6. Biancone L et al. (1996) Identification of a novel inducible cell-surface ligand of CD5 on activated lymphocytes. J Exp Med 184(3): 811-9.

7. Wood GS & Freudenthal PS. (1992) CD5 monoclonal antibodies react with human peripheral blood dendritic cells. Am J Pathol 141(4): 789–95. (FC, ICC) 8. Knapp et al. (Eds.). (1989) T5.3 Epitope mapping of the CD5 molecule. In: Leucocyte Typing IV: White cell differentiation antigens (pp. 336–7). New York: Oxford University Press.

9. Bernard A et al. (Eds.). (1984) Leucocyte Typing. New York: Springer-Verlag.

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