A (1) II	Anti-Human CD5 Antibody, Clone UCHT2, PE		STENCELL™ T E C H N O L O G I E S
Antibodies	Mouse m against h	onoclonal IgG1 antibody Juman, rhesus, cynomolgus	Scientists Helping Scientists [™] WWW.STEMCELL.COM
	CD3, FE-C	lonjugateu	TOLL FREE PHONE 1 800 667 0322 • PHONE +1 604 877 0713
Catalog #60082PE	100 Tests	5 uL/test	INFO@STEMCELL.COM • TECHSUPPORT@STEMCELL.COM
#60082PE.1	25 Tests	5 µL/test	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:	IgG1, kappa		
Immunogen:	Human thymocytes followed by Sézary T cells		
Conjugate:	PE		

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; 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 μ L per 1 x 10 ⁶ cells in 100 μ L volume or per 100 μ L of whole blood. It is recommended that the antibody be titrated for optimal performance for each application.

Antibodies



Data



(A) Flow cytometry analysis of human buffy coat nucleated cells labeled with Anti-Human CD5 Antibody, Clone UCHT2, PE and Anti-Human CD20 Antibody, Clone 2H7, APC (Catalog #60008AZ).

(B) Flow cytometry analysis of human buffy coat nucleated cells labeled with a mouse IgG1, kappa PE isotype control antibody and Anti-Human CD20 Antibody, Clone 2H7, APC.

(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, PE. Histograms show labeling of buffy coat nucleated cells (Start) and isolated cells (Isolated). Labeling of start cells with a mouse IgG1, kappa PE isotype control antibody is shown (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.

STEMCELL TECHNOLOGIES INC.'S QUALITY MANAGEMENT SYSTEM IS CERTIFIED TO ISO 13485. PRODUCTS ARE FOR RESEARCH USE ONLY AND NOT INTENDED FOR HUMAN OR ANIMAL DIAGNOSTIC OR THERAPEUTIC USES UNLESS OTHERWISE STATED.

Copyright © 2016 by STEMCELL Technologies Inc. All rights reserved including graphics and images. STEMCELL Technologies & Design, STEMCELL Shield Design, Scientists Helping Scientists and EasySep are trademarks of STEMCELL Technologies Inc. All other trademarks are the property of their respective holders. While STEMCELL has made all reasonable efforts to ensure that the information provided by STEMCELL and its suppliers is correct, it makes no warranties or representations as to the accuracy or completeness of such information.