Anti-Human CD5 Antibody, Clone UCHT2

Antibodies

Mouse monoclonal IgG1 antibody against human, rhesus, cynomolgus

CD5, unconjugated

Catalog #60082 100 ug 0.5 mg/mL



Scientists Helping Scientists[™] | WWW.STEMCELL.COM

TOLL FREE PHONE 1800 667 0322 • PHONE +1604 877 0713
INFO@STEMCELL.COM • TECHSUPPORT@STEMCELL.COM
FOR GLOBAL CONTACT DETAILS VISIT OUR WEBSITE

FOR RESEARCH USE ONLY NOT INTENDED FOR HUMAN OR ANIMAL DIAGNOSTIC OR THERAPFUTIC 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: Unconjugated

Applications

Verified: FC

Reported: Cell attachment assays, FC, ICC, IHC, WB

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.

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 ≤ 1.0 µg per 1 x 10e6 cells in 100 µL volume. It is

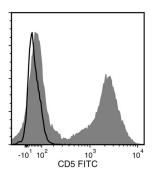
recommended that the antibody be titrated for optimal performance for each application.

Antibodies Anti-Human CD5 A

Anti-Human CD5 Antibody, Clone UCHT2



Data



Flow cytometry analysis of human peripheral blood mononuclear cells (PBMCs) labeled with Anti-Human CD5 Antibody, Clone UCHT2, followed by goat anti-mouse IgG, FITC (filled histogram) or a mouse IgG1, kappa isotype control antibody followed by goat anti-mouse IgG, FITC (black 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. Bernard A, et al. Eds. Leukocyte Typing. Springer-Verlag, New York, 1984
- 2. Mackenzie L, Lydyard PM. T5.3 Epitope mapping of the CD5 molecule. In: Knapp W, Ed. Leucocyte Typing IV: White Cell Differentiation Antigens. Oxford University Press, New York, pp, 336-37, 1989
- 3. Wood GS, Freudenthal PS. CD5 monoclonal antibodies react with human peripheral blood dendritic cells. Am J Pathol 141(4): 789-95, 1992 (FC, ICC)
- 4. Biancone L, et al. Identification of a novel inducible cell-surface ligand of CD5 on activated lymphocytes. J Exp Med 184(3): 811-19, 1996
- 5. Ozwara H, et al. 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, 1997 (FC)
- 6. Porter JC, Hogg N. 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, 1997 (Cell attachment assays)
- 7. Renaudineau Y, et al. An alternative exon 1 of the CD5 gene regulates CD5 expression in human B lymphocytes. Blood 106:2781. 2005 (FC, IHC, WB)
- 8. Kap YS, et al. A monoclonal antibody selection for immunohistochemical examination of lymphoid tissues from non-human primates. J Histochem Cytochem 57(12): 1159-67, 2009 (IHC)
- 9. Tabbekh M, et al. T-cell modulatory properties of CD5 and its role in antitumor immune responses. Oncoimmunology 2(1): e22841, 2013

Copyright © 2013 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.

STEMCELL TECHNOLOGIES INC.'S QUALITY MANAGEMENT SYSTEM IS CERTIFIED TO ISO 13485 MEDICAL DEVICE STANDARDS.