

Monoclonal Mouse Antibody to Human CD3 - Azide Free

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- Alternate names:** CD247, CD3 delta chain, CD3 epsilon chain, CD3 gamma chain, CD3 zeta chain, CD3D, CD3E, CD3G, CD3Z, T-cell surface glycoprotein CD3, T3D, T3G, T3Z, TCRZ
- Catalog No.:** SM1057A
- Quantity:** 1 mg
- Concentration:** 1 mg/ml
- Host / Isotype:** Mouse / IgG1
- Clone:** UCHT-1
- Immunogen:** Human infant thymocytes and lymphocytes from a patient with Sezary Syndrome.
- Applications:** Flow cytometry (Use 10ul of a 1/50-1/100 dilution to label 100 µl of whole blood). Immunohistochemistry on frozen sections. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
- Specificity:** UCH-T1 recognises a surface protein of peripheral blood T-cells of 19 kDa molecular weight. As a pan T-cell marker this antibody is present on more than 95% of circulation human peripheral T cells. This antibody stimulates T-cell proliferation in vitro. This clone is reported to cross react with chimpanzee (12) and Cynomolgus monkey (13).
- Storage:** Store the antibody at -20°C. Avoid repeated freezing and thawing. Shelf live: 12 month from despatch
- General Readings:**
1. Beverley, P.C.L. and Callard, R.E. (1981). Distinctive functional characteristics of human T lymphocytes defined by E rosetting or a monoclonal anti T-cell antibody. *Eur. J. Immunol.* 11: 329-34.
 2. Kung P, Goldstein G, Reinherz EL, Schlossman SF. Monoclonal antibodies defining distinctive human T cell surface antigens. *Science.* 1979 Oct 19;206(4416):347-9. PubMed PMID: 314668.
 3. Clevers H, Dunlap S, Terhorst C. The transmembrane orientation of the epsilon chain of the TcR/CD3 complex. *Eur J Immunol.* 1988 May;18(5):705-10. PubMed PMID: 2967760.
 4. Clevers H, Alarcon B, Wileman T, Terhorst C. The T cell receptor/CD3 complex: a dynamic protein ensemble. *Annu Rev Immunol.* 1988;6:629-62. PubMed PMID: 3289580.
 5. Meuer, S.C., Acuto, O., Hussey, R.E., et al. (1983). Evidence for the T3-associated 90 k heterodimer as the T cell antigen receptor. *Nature* 303: 808-10.
 6. Clark EA, Ledbetter JA. Leukocyte cell surface enzymology: CD45 (LCA, T200) is a protein tyrosine phosphatase. *Immunol Today.* 1989 Jul;10(7):225-8. PubMed PMID: 2553046.
 7. Campana D, Thompson JS, Amlot P, Brown S, Janossy G. The cytoplasmic expression of CD3 antigens in normal and malignant cells of the T lymphoid lineage. *J Immunol.* 1987 Jan 15;138(2):648-55. PubMed PMID: 3098852.

8. Erber, W.N., Pinching, A.J., Mason, D.Y. (1984). Immunocytochemical detection of T cell and B cell populations in routine blood smears. *Lancet* i: 1042-5.
9. Erber WN, Mynheer LC, Mason DY. APAAP labelling of blood and bone-marrow samples for phenotyping leukaemia. *Lancet*. 1986 Apr 5;1(8484):761-5. PubMed PMID: 2870268.
10. Denning, S.M., Tuck, D.T., Singer, K.H., Haynes, B.F. (1987). Activation of human thymocytes via CD3 and CD2 molecules. In McMichael, A.J. et al. *Leucocyte Typing III: White Cell Differentiation Antigens*. Edited by Oxford University Press pp 144-7.
11. Grogan TM, Fielder K, Rangel C, Jolley CJ, Wirt DP, Hicks MJ, et al. Peripheral T-cell lymphoma: aggressive disease with heterogeneous immunotypes. *Am J Clin Pathol*. 1985 Mar;83(3):279-88. PubMed PMID: 2983525.
12. Clark, E.A. et al. (1983). Evolution of epitopes on human and non-human primate lymphoid cell surface antigens. *Immunogenetics* 18: 599-615.
13. Maggiorella MT, Monardo F, Koanga-Mogtomo ML, Cioè L, Sernicola L, Corrias F, et al. Detection of infectious simian immunodeficiency virus in B- and T-cell lymphomas of experimentally infected macaques. *Blood*. 1998 May 1;91(9):3103-11. PubMed PMID: 9558363.