

CD57 (h): 293T Lysate: sc-110998

BACKGROUND

Over 100 cell surface markers have been identified through the use of monoclonal antibodies. Many of these markers have proven useful in identifying a specific subpopulation of cells within a mixed colony. Accordingly, these molecules have been assigned a "cluster of differentiation" (CD) designation. T lymphocytes displaying the natural killer (NK) cell marker CD57 (also designated Leu7) on their cell surface are distinguishable from other T cell subsets by their granular lymphocyte morphology and their clonal expansion in patients with AIDS and in recipients of bone marrow transplantation. CD57-positive cells have also been shown to localize to sites of certain tumors and large numbers of these cells are detected in the synovial fluid from patients suffering from rheumatoid arthritis.

REFERENCES

- Holter, W., Stockinger, H., Majdic, O. and Knapp, W. 1991. Phenotypical and functional characterization of leukocytes—the CD-system. *Wien. Klin. Wochenschr.* 103: 247-262.
- Dupuy d'Angeac, A., Monier, S., Jorgensen, C., Gao, Q., Travaglio-Encinoza, A., Bologna, C., Combe, B., Sany, J. and Reme, T. 1993. Increased percentage of CD3⁺, CD57⁺ lymphocytes in patients with rheumatoid arthritis. *Arthritis Rheum.* 36: 608-612.
- Kamel, O.W., Gelb, A.B., Shibuya, R.B. and Warnke, R.A. 1993. Leu7 (CD57) reactivity distinguishes nodular lymphocyte predominance Hodgkin's disease from nodular sclerosing Hodgkin's disease, T cell-rich B cell lymphoma and follicular lymphoma. *Am. J. Pathol.* 142: 541-546.
- Yamashita, N., Nguyen, L., Fahey, J.L. and Clement, L.T. 1993. Phenotypic properties and cytotoxic functions of human CD8⁺ cells expressing the CD57 antigen. *Nat. Immun.* 12: 79-91.
- Fukuda, H., Nakamura, H., Tominaga, N., Teshima, H., Hiraoka, A., Shibata, H. and Masaoka, T. 1994. Marked increase of CD8⁺S6F1⁺ and CD8⁺CD57⁺ cells in patients with graft-versus-host disease after allogeneic bone marrow transplantation. *Bone Marrow Transplant.* 13: 181-185.
- Kim, Y.B., Zhang, J., Davis, W.C. and Lunney, J.K. 1994. CD11/CD18 panel report for swine CD workshop. *Vet. Immunol. Immunopathol.* 43: 289-291.
- Okada, T., Liai, T., Kawachi, Y., Moroda, T., Takii, Y., Hatakeyama, K. and Abo, T. 1995. Origin of CD57⁺ T cells which increase at tumour sites in patients with colorectal cancer. *Clin. Exp. Immunol.* 102: 159-166.
- Kern, F., Ode-Hakim, S., Vogt, K., Hoflich, C., Reinke, P. and Volk, H.D. 1996. The enigma of CD57⁺CD28⁻ T cell expansion—nergy or activation? *Clin. Exp. Immunol.* 104: 180-184.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.

CHROMOSOMAL LOCATION

Genetic locus: B3GAT1 (human) mapping to 11q25.

PRODUCT

CD57 (h): 293T Lysate represents a lysate of human CD57 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

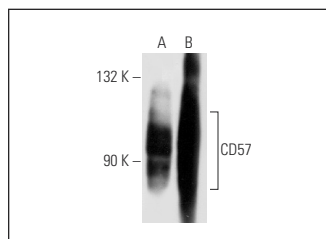
APPLICATIONS

CD57 (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive CD57 antibodies. Recommended use: 10-20 µl per lane.

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

CD57 (HCD57): sc-53669 is recommended as a positive control antibody for Western Blot analysis of enhanced human CD57 expression in CD57 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

DATA



CD57 (HCD57): sc-53669. Western blot analysis of CD57 expression in non-transfected: sc-117752 (A) and human CD57 transfected: sc-110998 (B) 293T whole cell lysates.

RESEARCH USE

For research use only, not for use in diagnostic procedures.