SANTA CRUZ BIOTECHNOLOGY, INC.

CD7 (H-126): sc-14004

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

CD7 (also designated T cell leukemia antigen) is a type I transmembrane glycoprotein that is expressed on pluripotential hemapoietic cells, most human thymocytes and some peripheral blood T cells. CD7 is a marker for pluripotential stem cell leukemias and T cell acute lymphocytic leukemia. A role for CD7 in the activation of T cells with γ/δ receptors has been suggested. CD8 T cells from patients infected with HIV-1 displayed profound down-modulation of CD7 expression as compared with healthy subjects. CD7 is among the pan-T-cell antigens down-regulated in acute infectious mononucleosis.

REFERENCES

1. Haynes, B.F., et al. 1989. Ontogeny of T cell precursors: a model for the initial stages of human T cell development. Immunol. Today 10: 87-91.
2. Barcena, A., et al. 1995. Tracing the expression of CD7 and other antigens during T and myeloid cell differentiation in the human fetal liver and thymus. Leuk. Lymphoma 17: 1-11.
3. Leta, E., et al. 1995. Production and characterization of the extracellular domain of human CD7 antigen: further evidence that CD7 has a role in T cell signaling. Cell. Immunol. 165: 101-109.
4. Ward, S.G., et al. 1995. Antibody ligation of CD7 leads to association with phosphoinositide 3-kinase and phosphatidylinositol 3,4,5-triphosphate formation in T lymphocytes. Eur. J. Immunol. 25: 502-507.

CHROMOSOMAL LOCATION

Genetic locus: CD7 (human) mapping to 17q25.3.

SOURCE

CD7 (H-126) is a rabbit polyclonal antibody raised against amino acids 27-153 mapping near the N-terminus of CD7 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

CD7 (H-126) is recommended for detection of CD7 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for CD7 siRNA (h): sc-35021, CD7 shRNA Plasmid (h): sc-35021-SH and CD7 shRNA (h) Lentiviral Particles: sc-35021-V.

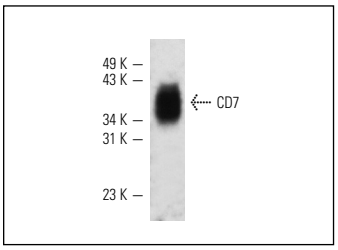
Molecular Weight of CD7: 40 kDa.

Positive Controls: CCRF-CEM cell lysate: sc-2225, Jurkat whole cell lysate: sc-2204 or HeLa whole cell lysate: sc-2200.

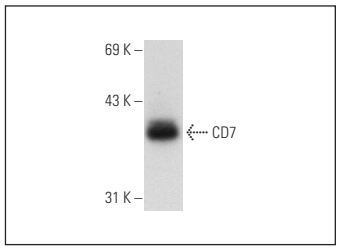
STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

DATA



CD7 (H-126): sc-14004. Western blot analysis of CD7 expression in Jurkat whole cell lysate.



CD7 (H-126): sc-14004. Western blot analysis of CD7 expression in CCRF-CEM whole cell lysate.

SELECT PRODUCT CITATIONS

1. Lu, L.H., et al. 2007. Characterization of galectin-9-induced death of Jurkat T cells. J. Biochem. 141: 157-172.
2. Nishi, N., et al. 2008. Functional and structural bases of a cysteine-less mutant as a long-lasting substitute for galectin-1. Glycobiology 18: 1065-1073.

RESEARCH USE

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

PROTOCOLS

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

MONOS Satisfaction Guaranteed

Try **CD7 (CBC.37): sc-59108 or CD7 (H-7): sc-28332**, our highly recommended monoclonal alternatives to CD7 (H-126).