

CD7 (Huly-m2): sc-7631

BACKGROUND

CD7 (also designated T cell leukemia antigen) is a type I transmembrane glycoprotein that is expressed on pluripotential hemopoietic 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 g/d 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

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CHROMOSOMAL LOCATION

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

SOURCE

CD7 (Huly-m2) is a mouse monoclonal antibody raised against human thymocytes.

PRODUCT

Each vial contains 200 µg IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

CD7 (Huly-m2) is available conjugated to either phycoerythrin (sc-7631 PE) or fluorescein (sc-7631 FITC), 200 µg/ml, for IF, IHC(P) and FCM.

APPLICATIONS

CD7 (Huly-m2) is recommended for detection of CD7 of human origin by 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 flow cytometry (1 µg per 1 x 10⁶ cells).

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.

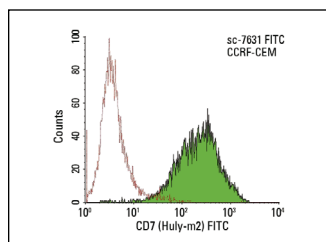
Molecular Weight of CD7: 40 kDa.

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

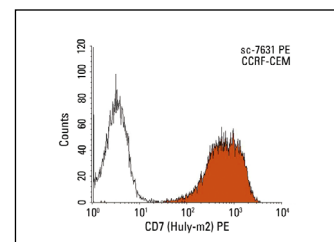
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 2) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz[®] Mounting Medium: sc-24941 or UltraCruz[®] Hard-set Mounting Medium: sc-359850.

DATA



CD7 (Huly-m2) FITC: sc-7631 FITC. FCM analysis of CCRF-CEM cells. Black line histogram represents the isotype control, normal mouse IgG_{2a}-FITC: sc-2856.



CD7 (Huly-m2) PE: sc-7631 PE. FCM analysis of CCRF-CEM cells. Black line histogram represents the isotype control, normal mouse IgG_{2a}-PE: sc-2867.

STORAGE

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

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.