SANTA CRUZ BIOTECHNOLOGY, INC.

# CD33 (h): 293T Lysate: sc-114798

## BACKGROUND

CD33 is a type I transmembrane glycoprotein that is found on granulocyte and macrophage precursors in the bone marrow, but is absent from pluripotent stem cells. CD33 is also expressed on monocytes in peripheral blood. It is used as a marker to distinguish myelogenous leukemia cells from lymphoid or erythroid leukemias. CD33 may function as a sialic acid-dependent cell adhesion molecule.

## REFERENCES


1. Andrews, R.G., et al. 1989. Precursors of colony-forming cells in humans can be distinguished from colony-forming cells by expression of the CD33 and CD34 antigens and light scatter properties. J. Exp. Med. 169: 1721-1731.
2. Handgretinger, R., et al. 1993. Expression of an early myelopoietic antigen (CD33) of a subset of human umbilical cord blood-derived natural killer cells. Immunol. Lett. 37: 223-228.
3. Pierelli, L., et al. 1993. Further investigations on the expression of HLA-DR, CD33 and CD13 surface antigens in purified bone marrow and peripheral blood CD34+ haematopoietic progenitor cells. British J. Haemotol. 84: 24-30.
4. Freeman, S.D., et al. 1995. Characterization of CD33 as a new member of the sialoadhesin family of cellular interaction molecules. Blood 85: 2005-2012.
5. Kelm, S., et al. 1996. The sialoadhesins: a family of sialic-acid-dependent cellular recognition molecules within the immunoglobulin superfamily. Glycoconjugate J. 13: 913-926.
6. Sgroi, D., et al. 1996. A single N-linked glycosylation site is implicated in the regulation of ligand recognition by the I-type lectins CD22 and CD33. J. Biol. Chem. 271: 18803-18809.


## CHROMOSOMAL LOCATION

Genetic locus: CD33 (human) mapping to 19q13.41.

## PRODUCT

CD33 (h): 293T Lysate represents a lysate of human CD33 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

## 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.

## APPLICATIONS

CD33 (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive CD33 antibodies. Recommended use: 10-20 µl per lane.

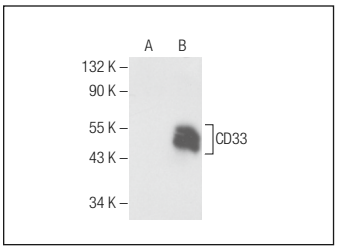
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-tranfected 293T cells.

CD33 (E-6): sc-376184 is recommended as a positive control antibody for Western Blot analysis of enhanced human CD33 expression in CD33 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

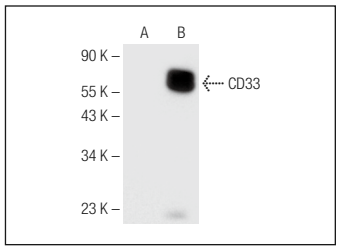
## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

## DATA




CD33 (E-6): sc-376184. Western blot analysis of CD33 expression in non-transfected: sc-117752 (**A**) and human CD33 transfected: sc-114798 (**B**) 293T whole cell lysates.




CD33 (B-9): sc-374450. Western blot analysis of CD33 expression in non-transfected: sc-117752 (**A**) and human CD33 transfected: sc-114798 (**B**) 293T whole cell lysates.

## 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.