

CD33 (C-16): sc-7038

BACKGROUND

CD33 is a 67 kDa 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

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- Favaloro, E.J., Bradstock, K.F., Kabral, A., Grimsley, P., Zowtyj, H. and Zola, H. 1988. Further characterization of human myeloid antigens (gp160,95; gp150; gp67): investigation of epitopic heterogeneity and non-haemopoietic distribution using panels of monoclonal antibodies belonging to CD11b, CD13 and CD33. *Br. J. Haematol.* 69: 163-171.
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- Bradstock, K.F., Kirk, J., Grimsley, P.G., Kabral, A. and Hughes, W.G. 1989. Unusual immunophenotypes in acute leukaemias: incidence and clinical correlations. *Br. J. Haematol.* 72: 512-518.

CHROMOSOMAL LOCATION

Genetic locus: CD33 (human) mapping to 19q13.3.

SOURCE

CD33 (C-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of CD33 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.

Blocking peptide available for competition studies, sc-7038 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

PROTOCOLS

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

APPLICATIONS

CD33 (C-16) is recommended for detection of CD33 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 CD33 siRNA (h): sc-42782, CD33 shRNA Plasmid (h): sc-42782-SH and CD33 shRNA (h) Lentiviral Particles: sc-42782-V.

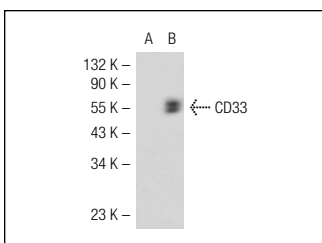
Molecular Weight of CD33: 67 kDa.

Positive Controls: CD33 (h): 293T Lysate: sc-114798, THP-1 cell lysate: sc-2238 or AML-193 whole cell lysate: sc-364182.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



CD33 (C-16): sc-7038. 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.


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Try **CD33 (6C5/2): sc-53199** or **CD33 (B-9): sc-374450**, our highly recommended monoclonal alternatives to CD33 (C-16). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **CD33 (6C5/2): sc-53199**.