CD33 (B-9): sc-374450

**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**


**CHROMOSOMAL LOCATION**

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

**SOURCE**

CD33 (B-9) is a mouse monoclonal antibody raised against amino acids 231-340 mapping near the C-terminus of CD33 of human origin.

**PRODUCT**

Each vial contains 200 µg IgGk kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. CD33 (B-9) is available conjugated to agarose (sc-374450 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-374450 HRP), 200 µg/ml, for WB, HCOIP and ELISA; to either phycoerythin (sc-374450 PE), fluorescein (sc-374450 FITC), Alexa Fluor® 488 (sc-374450 AF488), Alexa Fluor® 546 (sc-374450 AF546), Alexa Fluor® 594 (sc-374450 AF594) or Alexa Fluor® 647 (sc-374450 AF647), 200 µg/ml, for WB (RGB), IF, HCOIP and FCM; and to either Alexa Fluor® 680 (sc-374450 AF680) or Alexa Fluor® 790 (sc-374450 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

**APPLICATIONS**

CD33 (B-9) is recommended for detection of precursor and mature forms of CD33 of human origin by Western Blotting (starting dilution 1:100, 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); may cross-react with Siglec-5.

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: AML-193 whole cell lysate: sc-364182 or CD33 (h): 293T Lysate: sc-114798.

**RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended:

1) Western Blotting: use m-IgGk HRP: sc-516102 or m-IgGk 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. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGk FITC: sc-516140 or m-IgGk HRP: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

**DATA**

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


**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.

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