SANTA CRUZ BIOTECHNOLOGY, INC.

CD43 (84-3C1): sc-21774

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Over 100 cell surface markers have been identified through the use of monoclonal antibodies. Many of these markers have proven useful in identifying a specific subpopulation of cells within a mixed colony. Accordingly, these molecules have been assigned a "cluster of differentiation" (CD) designation. CD43 is the major O-glycosylated cell-surface associated sialoglycoprotein found on the cell membranes of leukocytes. It is a member of the surface mucin family which plays a central role in cellular adhesion tumor progression. Also called leukosialin, CD43 is best known as a maker for identifying normal and neoplastic T cells and a subset of neoplastic B cells within tissues. CD43 is thought to function as a negative regulator of cellular adhesion.

REFERENCES

1. Holter, W., et al. 1991. Phenotypical and functional characterization of leukocytes—the CD-system. Wien. Klin. Wochenschr. 103: 247-262.
2. Kim, Y.B., et al. 1994. CD11/CD18 panel report for swine CD workshop. Vet. Immunol. Immunopathol. 43: 289-291.
3. Manjunath, N., et al. 1995. Negative regulation of T-cell adhesion and activation by CD43. Nature 377: 535-538.
4. Sanchez-Mateos, P., et al. 1995. Regulatory role of CD43 leukosialin in integrin-mediated T-cell adhesion to endothelial and extracellular matrix ligands and is polar redistribution to a cellular uropod. Blood 86: 2228-2239.

CHROMOSOMAL LOCATION

Genetic locus: SPN (human) mapping to 16p11.2.

SOURCE

CD43 (84-3C1) is a mouse monoclonal antibody raised against stimulated human leukocytes.

PRODUCT

Each vial contains 200 µg IgG_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

CD43 (84-3C1) is available conjugated to either phycoerythrin (sc-21774 PE) or fluorescein (sc-21774 FITC), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM.

APPLICATIONS

CD43 (84-3C1) is recommended for detection of CD43 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)] and flow cytometry (1 µg per 1 x 10^6 cells).

Suitable for use as control antibody for CD43 siRNA (h): sc-29999, CD43 shRNA Plasmid (h): sc-29999-SH and CD43 shRNA (h) Lentiviral Particles: sc-29999-V.

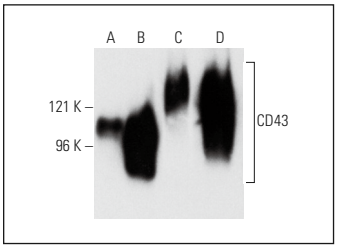
Molecular Weight of CD43: 115-130 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204, K-562 whole cell lysate: sc-2203 or Ramos cell lysate: sc-2216.

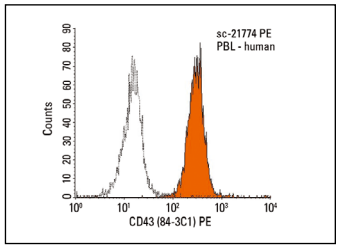
RECOMMENDED SUPPORT REAGENTS

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. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

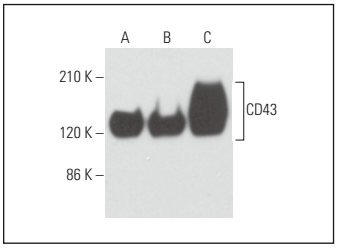
DATA



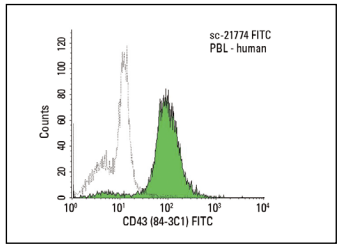
CD43 (84-3C1): sc-21774. Western blot analysis of CD43 expression in Jurkat (**A**), K-562 (**B**), Ramos (**C**), and U-937 (**D**) whole cell lysates.



CD43 (84-3C1) PE: sc-21774 PE. FCM analysis of human peripheral blood leukocytes. Black line histogram represents the isotype control, normal mouse IgG_1-PE: sc-2866.



CD43 (84-3C1): sc-21774. Western blot analysis of CD43 expression in Jurkat (**A**), MOLT-4 (**B**) and HL-60 (**C**) whole cell lysates.



CD43 (84-3C1) FITC: sc-21774 FITC. FCM analysis of human peripheral blood leukocytes. Black line histogram represents the isotype control, normal mouse IgG_1-FITC: sc-2855.

SELECT PRODUCT CITATIONS

1. Julien, S., et al. 2007. Sialyl-Lewis^x on P-selectin glycoprotein ligand-1 is regulated during differentiation and maturation of dendritic cells: a mechanism involving the glycosyltransferases C2GnT1 and ST3Gal I. J. Immunol. 179: 5701-5710.

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.