SANTA CRUZ BIOTECHNOLOGY, INC.

CD43 (0.N.117): sc-70681

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.
5. Baeckstrom, D., et al. 1995. Expression of the leukocyte-associated sialoglycoprotein CD43 by a colon carcinoma cell line. J. Biol. Chem. 270: 13688-13692.
6. Lynch, E.F., et al. 1995. CD43 and CD5 antibodies define four normal and neoplastic B-cell subsets: a three-color flow cytometric study. Cytometry 22: 223-231.
7. Ellies, L.G., et al. 1996. The CD43 130-kD peripheral T-cell activation antigen is downregulated in thymic positive selection. Blood 88: 1725-1732.
8. Santamaria, M., et al. 1996. Specific monoclonal antibodies against leukocyte restricted cell surface molecule CD43 react with nonhematopoietic tumor cells. Cancer Res. 56: 3526-3529.

CHROMOSOMAL LOCATION

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

SOURCE

CD43 (0.N.117) 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.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

APPLICATIONS

CD43 (0.N.117) 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.

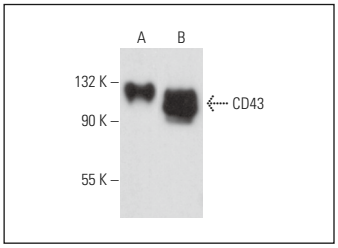
Molecular Weight of CD43: 115-130 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204, CCRF-CEM cell lysate: sc-2225 or MOLT-4 cell lysate: sc-2233.

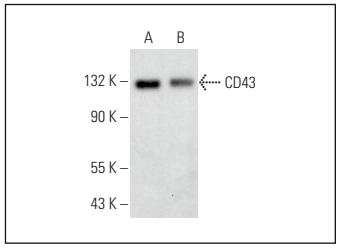
RECOMMENDED SUPPORT REAGENTS

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 (0.N.117): sc-70681. Western blot analysis of CD43 expression in Jurkat (**A**) and CCRF-CEM (**B**) whole cell lysates.



CD43 (0.N.117): sc-70681. Western blot analysis of CD43 expression in MOLT-4 (**A**) and SUP-T1 (**B**) whole cell lysates.

SELECT PRODUCT CITATIONS

1. Bai, Y., et al. 2017. Clinical analysis of the effect of anti-allergy treatment on pocket-related complications following pacemaker implantation. Exp. Ther. Med. 13: 2876-2882.

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 for detailed protocols and support products.