SANTA CRUZ BIOTECHNOLOGY, INC.

CD43 (M-19): sc-7054

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 marker 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. Baeckstrom, D., et al. 1995. Expression of the leukocyte-associated sialoglycoprotein CD43 by a colon carcinoma cell line. J. Biol. Chem. 270: 13688-13692.

CHROMOSOMAL LOCATION

Genetic locus: Spn (mouse) mapping to 7 F3.

SOURCE

CD43 (M-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of CD43 of mouse 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-7054 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

CD43 (M-19) is recommended for detection of CD43 of mouse and rat 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 CD43 siRNA (m): sc-37247, CD43 shRNA Plasmid (m): sc-37247-SH and CD43 shRNA (m) Lentiviral Particles: sc-37247-V.

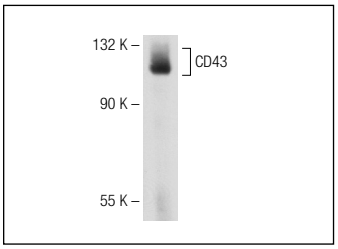
Molecular Weight of CD43: 115-130 kDa.

Positive Controls: CTLL-2 cell lysate: sc-2242 or rat PBL whole cell lysate.

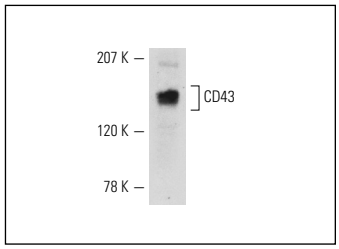
RECOMMENDED SECONDARY REAGENTS

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



CD43 (M-19): sc-7054. Western blot analysis of CD43 expression in rat PBL whole cell lysate.



CD43 (M-19): sc-7054. Western blot analysis of CD43 expression in CTLL-2 whole cell lysate.

SELECT PRODUCT CITATIONS

1. Garcia, G.G., et al. 2005. Age-associated changes in glycosylation of CD43 and CD45 on mouse CD4 T cells. Eur. J. Immunol. 35: 622-631.
2. Alcaide, P., et al. 2007. The 130-kDa glycoform of CD43 functions as an E-Selectin ligand for activated Th1 cells *in vitro* and in delayed-type hypersensitivity reactions *in vivo*. J. Invest. Dermatol. 127: 1964-1972.
3. Garcia, G.G., et al. 2007. Age-related defects in Moesin/Ezrin cytoskeletal signals in mouse CD4 T cells. J. Immunol. 179: 6403-6409.
4. Zhu, H., et al. 2012. Impaired N-cadherin-mediated adhesion increases the risk of inducible ventricular arrhythmias in isolated rat hearts. Sci. Res. Essays 7: 2983-2991.
5. Barthelmes, D., et al. 2013. Isolation and characterization of mouse bone marrow-derived Lin$^-$/VEGF-R2 + progenitor cells. Ann. Hematol. E-published.

STORAGE

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