

CD43 (84-3C1): sc-21774

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

- Holter, W., et al. 1991. Phenotypical and functional characterization of leukocytes—the CD-system. *Wien. Klin. Wochenschr.* 103: 247-262.
- Kim, Y.B., et al. 1994. CD11/CD18 panel report for swine CD workshop. *Vet. Immunol. Immunopathol.* 43: 289-291.
- Manjunath, N., et al. 1995. Negative regulation of T-cell adhesion and activation by CD43. *Nature* 377: 535-538.
- 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 IgG₁ 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 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 10⁶ 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.

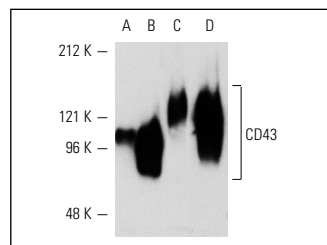
Molecular Weight of CD43: 115-130 kDa.

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

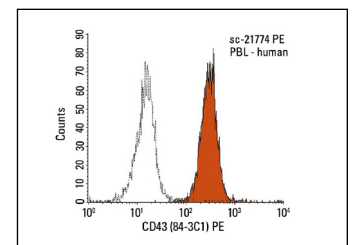
RECOMMENDED SUPPORT REAGENTS

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).

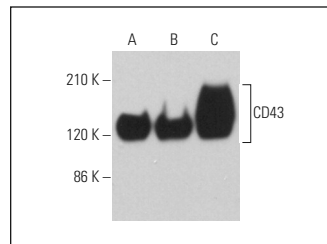
DATA



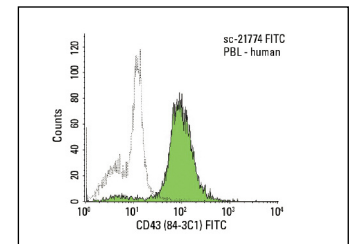
CD43 (84-3C1): sc-21774. Western blot analysis of CD43 expression in Jurkat (A), K-562 (B), Ramos (C) and U-937 (D) whole cell lysates.



CD43 (84-3C1) PE: sc-21774 PE. FCM analysis of human peripheral blood leukocytes. Black line histogram represents the isotype control, normal mouse IgG₁: 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 IgG₁: sc-2855.

SELECT PRODUCT CITATIONS

- 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.