

CD43 (DF-T1): sc-6256

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.

CHROMOSOMAL LOCATION

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

SOURCE

CD43 (DF-T1) is a mouse monoclonal antibody raised against myeloblastic cell line KG1.

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 (DF-T1) is available conjugated to agarose (sc-6256 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-6256 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-6256 PE), fluorescein (sc-6256 FITC), Alexa Fluor® 488 (sc-6256 AF488), Alexa Fluor® 546 (sc-6256 AF546), Alexa Fluor® 594 (sc-6256 AF594) or Alexa Fluor® 647 (sc-6256 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-6256 AF680) or Alexa Fluor® 790 (sc-6256 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

STORAGE

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

APPLICATIONS

CD43 (DF-T1) 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)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) 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.

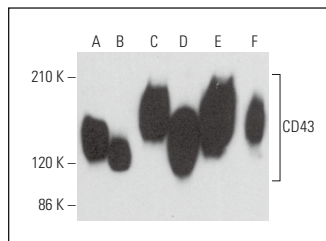
Molecular Weight of CD43: 115-130 kDa.

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

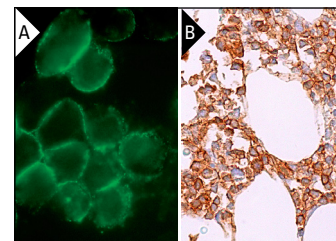
RESEARCH USE

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

DATA



CD43 (DF-T1): sc-6256. Western blot analysis of CD43 expression in Jurkat (A), Ramos (B), K-562 (C), U-937 (D), HL-60 (E) and MDA-MB-231 (F) whole cell lysates. Detection reagent used: m-IgGκ BP-HRP: sc-516102.



CD43 (DF-T1): sc-6256. Immunofluorescence staining of methanol-fixed Jurkat cells showing membrane localization (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human bone marrow tissue showing membrane and cytoplasmic staining of hematopoietic cells (B).

SELECT PRODUCT CITATIONS

- Gomez-Mouton, C., et al. 2001. Segregation of leading-edge and uropod components into specific lipid rafts during T cell polarization. *Proc. Natl. Acad. Sci. USA* 98: 9642-9647.
- Hanawa, H., et al. 2002. A novel costimulatory signaling in human T lymphocytes by a splice variant of CD28. *Blood* 99: 2138-2145.
- Booth, A.M., et al. 2006. Exosomes and HIV Gag bud from endosome-like domains of the T cell plasma membrane. *J. Cell Biol.* 172: 923-935.
- Linge, A., et al. 2007. Downregulation of caveolin-1 affects bleomycin-induced growth arrest and cellular senescence in A549 cells. *Int. J. Biochem. Cell Biol.* 39: 1964-1974.
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- Ma, X.B., et al. 2015. CD43 expression in diffuse large B-cell lymphoma, not otherwise specified: CD43 is a marker of adverse prognosis. *Hum. Pathol.* 46: 593-599.
- Ma, X.B., et al. 2018. Coexpression of CD5 and CD43 predicts worse prognosis in diffuse large B-cell lymphoma. *Cancer Med.* 7: 4284-4295.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.

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