

CD75 (T-17): sc-5444

BACKGROUND

Modification of cell surface glycoprotein and glycolipid oligosaccharides is thought to play a role in tumorigenesis and metastasis. Sialyltransferases catalyze the incorporation of sialic acid into the carbohydrate chains present on glycoproteins and function in intracellular terminal glycosylation pathways. The expression of one such sialyltransferase, CD75, (also known as ST6GAL1), leads to the appearance of the cell surface antigens CD76, HB6 and CDw75. Expressed in the golgi apparatus and secreted into the extracellular fluid, CD75 is a type II membrane protein that is involved in generating sialylated antigens that function as cell-surface carbohydrate determinants. One such antigen, CDw75 (also known as CD75s or CD75-sialylated), is formed via the catalytic transfer of a sialic acid residue from CD75 to a cell surface galactose-containing carbohydrate acceptor. While CD75 functions in cells throughout the body, CDw75 is found primarily on B and T cells and may be upregulated in B-cell leukemias, suggesting a possible role for CDw75 in carcinogenesis.

REFERENCES

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3. Erikstein, B.K., et al. 1992. Cell cycle-dependent regulation of CDw75 (β -galactoside α -2, 6-sialyltransferase) on human B lymphocytes. *Eur. J. Immunol.* 2: 1149-1155.
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6. De Lau, W.B., et al. 1993. HB4 antibody recognizes a carbohydrate structure on lymphocyte surface proteins related to HB6, CDw75, and CD76 antigens. *J. Immunol.* 150: 4911-4919.
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8. Reed, W., et al. 1993. CDw75 antigen expression in breast lesions. *Pathol. Res. Practice* 189: 394-398.
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CHROMOSOMAL LOCATION

Genetic locus: ST6GAL1 (human) mapping to 3q27.3; St6gal1 (mouse) mapping to 16 B1.

SOURCE

CD75 (T-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of CD75 of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-5444 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

CD75 (T-17) is recommended for detection of CD75 of human and, to a lesser extent, mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

CD75 (T-17) is also recommended for detection of CD75 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for CD75 siRNA (h): sc-42804, CD75 siRNA (m): sc-42805, CD75 shRNA Plasmid (h): sc-42804-SH, CD75 shRNA Plasmid (m): sc-42805-SH, CD75 shRNA (h) Lentiviral Particles: sc-42804-V and CD75 shRNA (m) Lentiviral Particles: sc-42805-V.

Molecular Weight of CD75: 46 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200.

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) 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.

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 or our catalog for detailed protocols and support products.



Try **CD75 (B-L5): sc-65306**, our highly recommended monoclonal alternative to CD75 (T-17).