**ST6GAL1 (ZB55): sc-20063**

**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 sialytransferase, 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-sialyated), 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**


**CHROMOSOMAL LOCATION**

Genetic locus: ST6GAL1 (human) mapping to 3q27.3.

**SOURCE**

ST6GAL1 (ZB55) is a mouse monoclonal antibody raised against a CD32 peptide.

**PRODUCT**

Each vial contains 200 µg IgM kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

ST6GAL1 (ZB55) is available conjugated to either phycoerythrin (sc-20063 PE) or fluorescein (sc-20063 FITC), 200 µg/ml, for WB (RGB), IF, IHC(P) 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**

ST6GAL1 (ZB55) is recommended for detection of ST6GAL1 of human origin by 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).

**RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended:
1) Immunofluorescence: use m-IgGx BP-FITC: sc-516140 or m-IgGx BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850. 2) Immunohistochemistry: use m-IgGx BP-HRP: sc-516102 with DAB, 50X: sc-24984 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

**DATA**

ST6GAL1 (ZB55): sc-20063. Indirect FCM analysis of BJAB cells stained with ST6GAL1 (ZB55), followed by PerCP-conjugated goat anti-mouse IgM: sc-45084.

ST6GAL1 (ZB55): sc-20063. Immunofluorescence staining of methanol-fixed NAMALWA cells showing membrane localization (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human liver tumor showing membrane staining of tumor cells at low (A) and high (B) magnification. Kindly provided by The Swedish Human Protein Atlas (HPA) program.

ST6GAL1 (ZB55): sc-20063. Immunohistochemistry of human liver cell carcinoma showing membrane localization of ST6GAL1 (A) and high (B) magnification. Kindly provided by The Swedish Human Protein Atlas (HPA) program.

**SELECT PRODUCT CITATIONS**


**RESEARCH USE**

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