

Sialyltransferase 10 (C-20): sc-68738

BACKGROUND

Sialyltransferase 10, also known as type 2 lactosamine α 2,3-sialyltransferase or ST3GAL6, is a 331 amino acid protein belonging to the glycosyltransferase 29 family. Localized to the Golgi apparatus membrane, Sialyltransferase 10 is a single-pass type II membrane protein. Sialyltransferases, such as Sialyltransferase 10, catalyze the transfer of sialic acid from cytidine 5' monophospho-N-acetylneuraminic acid (CMP-NeuAc) to terminal positions of glycoprotein and glycolipid carbohydrate groups. Terminal NeuAc residues are key determinants of carbohydrate structures, such as the sialyl-Lewis X determinants. Unlike other members of the family, such as St3Gal-III and St3Gal-IV, Sialyltransferase 10 exhibits a restricted substrate specificity. Specifically, it utilizes Gal β 1,4GlcNAc on glycoproteins, and neolactotetraosylceramide and neolactoheptaosylceramide, but not lactotetraosylceramide, lactosylceramide or asialo-GM1. Sialyltransferase 10 is localized to chromosome 3q12.1.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: ST3GAL6 (human) mapping to 3q12.1; St3gal6 (mouse) mapping to 16 C1.2.

SOURCE

Sialyltransferase 10 (C-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of Sialyltransferase 10 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-68738 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Sialyltransferase 10 (C-20) is recommended for detection of Sialyltransferase 10 of mouse, rat and human 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).

Sialyltransferase 10 (C-20) is also recommended for detection of Sialyltransferase 10 in additional species, including canine and bovine.

Suitable for use as control antibody for Sialyltransferase 10 siRNA (h): sc-76495, Sialyltransferase 10 siRNA (m): sc-76496, Sialyltransferase 10 shRNA Plasmid (h): sc-76495-SH, Sialyltransferase 10 shRNA Plasmid (m): sc-76496-SH, Sialyltransferase 10 shRNA (h) Lentiviral Particles: sc-76495-V and Sialyltransferase 10 shRNA (m) Lentiviral Particles: sc-76496-V.

Molecular Weight of Sialyltransferase 10: 38 kDa.

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.