

ST6GAL2 (C-16): sc-324364

BACKGROUND

ST6GAL2 (ST6 β -galactosamide α -2,6-sialyltransferase 2), also known as SIAT2 (sialyltransferase 2) or ST6GalII, is a 529 amino acid single-pass type II membrane protein that belongs to the glycosyltransferase 29 family. Localizing to the Golgi stack membrane, ST6GAL2 is weakly expressed in some tissues, such as small intestine, colon and fetal brain. ST6GAL2 transfers sialic acid from the donor of substrate CMP-sialic acid to galactose-containing acceptor substrates, has α -2,6-sialyltransferase activity toward oligosaccharides that have the Gal- β -1,4-GlcNAc sequence at the non-reducing end of their carbohydrate groups, and has weak or no activities toward glycoproteins and glycolipids. The gene that encodes ST6GAL2 spans over 85 kb and maps to human chromosome 2q12.2. The 3' untranslated region of ST6GAL2 contains an Alu repetitive element, and the resulting protein exists as two alternatively spliced isoforms.

REFERENCES

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- Horvath, J.E., et al. 2005. Punctuated duplication seeding events during the evolution of human chromosome 2p11. *Genome Res.* 15: 914-927.
- Rohfritsch, P.F., et al. 2006. Probing the substrate specificity of four different sialyltransferases using synthetic β -D-Galp-(1 \rightarrow 4)- β -D-GlcpNAc-(1 \rightarrow 2)- α -D-Manp-(1 \rightarrow 0) (CH₂)₇CH₃ analogues general activating effect of replacing N-acetylglucosamine by N-propionylglucosamine. *Biochim. Biophys. Acta* 1760: 685-692.
- Lehoux, S., et al. 2010. Transcriptional regulation of the human ST6GAL2 gene in cerebral cortex and neuronal cells. *Glycoconj. J.* 27: 99-114.

CHROMOSOMAL LOCATION

Genetic locus: ST6GAL2 (human) mapping to 2q12.2.

SOURCE

ST6GAL2 (C-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of ST6GAL2 of human origin.

STORAGE

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

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-324364 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

ST6GAL2 (C-16) is recommended for detection of ST6GAL2 of 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).

ST6GAL2 (C-16) is also recommended for detection of ST6GAL2 in additional species, including canine, bovine and porcine.

Suitable for use as control antibody for ST6GAL2 siRNA (h): sc-105192, ST6GAL2 shRNA Plasmid (h): sc-105192-SH and ST6GAL2 shRNA (h) Lentiviral Particles: sc-105192-V.

Molecular Weight of ST6GAL2 isoforms: 60/53 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.

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.