

ST8Sia II (S-15): sc-104669

BACKGROUND

ST8Sia II (ST8 α -N-acetyl-neuraminide α -2,8-sialyltransferase II), also known as STX (sialyltransferase X) or SIAT8B, is a 375 amino acid single-pass type II membrane protein that localizes to the membrane of the Golgi apparatus. Expressed in adult heart and thymus, as well as in fetal kidney, brain and heart, ST8Sia II functions to catalyze the transfer of sialic acid to N-linked glycoproteins and oligosaccharides. More specifically, ST8Sia II uses CMP-sialic acid as a donor to transfer sialic acid, via α -2,8-linkages, to the α -2,6-linked and α -2,3-linked sialic acid residues of N-glycans. Additionally, ST8Sia II is thought to be involved in the expression of polysialic acid (PSA), an important regulator of neuronal plasticity. Defects in the gene encoding ST8Sia II may be associated with schizophrenia and tumorigenesis.

REFERENCES

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3. Angata, K., Suzuki, M., McAuliffe, J., Ding, Y., Hindsgaul, O. and Fukuda, M. 2000. Differential biosynthesis of polysialic acid on neural cell adhesion molecule (NCAM) and oligosaccharide acceptors by three distinct α -2,8-sialyltransferases, ST8Sia IV (PST), ST8Sia II (STX), and ST8Sia III. *J. Biol. Chem.* 275: 18594-18601.
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CHROMOSOMAL LOCATION

Genetic locus: ST8SIA2 (human) mapping to 15q26.1; St8sia2 (mouse) mapping to 7 D2.

SOURCE

ST8Sia II (S-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of ST8Sia II 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-104669 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

ST8Sia II (S-15) is recommended for detection of ST8Sia II 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).

ST8Sia II (S-15) is also recommended for detection of ST8Sia II in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for ST8Sia II siRNA (h): sc-89953, ST8Sia II siRNA (m): sc-106573, ST8Sia II shRNA Plasmid (h): sc-89953-SH, ST8Sia II shRNA Plasmid (m): sc-106573-SH, ST8Sia II shRNA (h) Lentiviral Particles: sc-89953-V and ST8Sia II shRNA (m) Lentiviral Particles: sc-106573-V.

Molecular Weight of ST8Sia II: 42 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.