

Sialyltransferase 7E (T-18): sc-54070

BACKGROUND

Sialyltransferase 7E, also known as GD1 α synthase or ST6GalNAc V, is a Golgi type II transmembrane glycosyltransferase predominantly expressed in the brain. It belongs to the ST6GalNAc family of sialyltransferases involved in the biosynthesis of α -series gangliosides. Gangliosides are critical components to a variety of cellular events including cell adhesion, protein targeting, cell-cell interaction and mediation of invasion of vectors. They are glycosphingolipids with sialic acids in the carbohydrate portion. Sialyltransferase 7E is specific for the substrate GM1 β , leading to the synthesis of the ganglioside GD1 α . In addition, Sialyltransferase 7E can catalyze the synthesis of Disialyl Lc4 from Sialyl Lc4, leading to the synthesis of disialyl Lewis a.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: ST6GALNAC5 (human) mapping to 1p31.1; St6galnac5 (mouse) mapping to 3 H3.

SOURCE

Sialyltransferase 7E (T-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Sialyltransferase 7E 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-54070 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Sialyltransferase 7E (T-18) is recommended for detection of Sialyltransferase 7E 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 7E (T-18) is also recommended for detection of Sialyltransferase 7E in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for Sialyltransferase 7E siRNA (h): sc-72299, Sialyltransferase 7E siRNA (m): sc-72300, Sialyltransferase 7E shRNA Plasmid (h): sc-72299-SH, Sialyltransferase 7E shRNA Plasmid (m): sc-72300-SH, Sialyltransferase 7E shRNA (h) Lentiviral Particles: sc-72299-V and Sialyltransferase 7E shRNA (m) Lentiviral Particles: sc-72300-V.

Molecular Weight of Sialyltransferase 7E: 38 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204.

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.