

St3Gal-III (O-25): sc-134040

BACKGROUND

Cell type-specific expression of unique carbohydrate structures on cell surface glycoproteins and glycolipids provides information relevant to cell-cell interactions in developing and adult organisms. Sialyltransferases contribute to the diversity of carbohydrate structures through their attachment of sialic acid in various terminal positions on glycolipid and on glycoprotein (N-linked and O-linked) carbohydrate groups. The N-acetylglucosaminidase α 2,3 sialyltransferase (ST3GAL-III), also known as SIAT6 and ST3GAL3, is a type II membrane protein that catalyzes the transfer of sialic acid from CMP-sialic acid to galactose-containing substrates. Localized to the Golgi apparatus and the Golgi stack membrane, St3Gal-III is secreted into the body fluid. Twenty-six named isoforms of St3Gal-III exist as a result of alternative splicing events.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: ST3GAL3 (human) mapping to 1p34.1; St3gal3 (mouse) mapping to 4 D2.1.

SOURCE

St3Gal-III (O-25) is a Protein A purified rabbit polyclonal antibody raised against synthetic St3Gal-III peptide of human origin.

PRODUCT

Each vial contains 100 μ g IgG in 1.0 ml PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

APPLICATIONS

St3Gal-III (O-25) is recommended for detection of St3Gal-III of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for St3Gal-III siRNA (h): sc-88173, St3Gal-III siRNA (m): sc-153861, St3Gal-III shRNA Plasmid (h): sc-88173-SH, St3Gal-III shRNA Plasmid (m): sc-153861-SH, St3Gal-III shRNA (h) Lentiviral Particles: sc-88173-V and St3Gal-III shRNA (m) Lentiviral Particles: sc-153861-V.

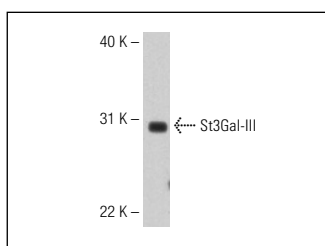
Molecular Weight of St3Gal-III isoforms A1-E3: 5-48 kDa.

Positive Controls: Human fetal muscle whole cell lysate.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

DATA



St3Gal-III (O-25): sc-134040. Western blot analysis of St3Gal-III expression in human fetal muscle tissue extract.

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.