

# St3Gal-III (E-12): sc-160847

## 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  $\alpha$ 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 (E-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of St3Gal-III of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-160847 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

St3Gal-III (E-12) 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), 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); non cross-reactive with other St3Gal family members.

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.

## 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](http://www.scbt.com) or our catalog for detailed protocols and support products.