

Syntaxin 19 (S-16): sc-99653

BACKGROUND

Syntaxins, a family of proteins involved in the fusion of synaptic vesicles with the plasma membrane, display broad tissue distribution and contain C-terminal hydrophobic domains that direct them to their respective intracellular compartments. Syntaxin 19, also known as STX19, is a 294 amino acid peripheral membrane protein that contains one t-SNARE coiled-coil homology domain and belongs to the syntaxin family, suggesting a role in synaptic vesicle fusion. The gene encoding Syntaxin 19 maps to human chromosome 3, which houses over 1,100 genes, including a chemokine receptor (CKR) gene cluster and a variety of human cancer-related gene loci. Key tumor suppressing genes on chromosome 3 include those that encode the apoptosis mediator RASSF1, the cell migration regulator HYAL1 and the angiogenesis suppressor SEMA3B. Marfan syndrome, porphyria, von Hippel-Lindau syndrome, osteogenesis imperfecta and Charcot-Marie-Tooth disease are a few of the numerous genetic diseases associated with chromosome 3.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: STX19 (human) mapping to 3q11.1; Stx19 (mouse) mapping to 16 C1.3.

SOURCE

Syntaxin 19 (S-16) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of Syntaxin 19 of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-99653 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Syntaxin 19 (S-16) is recommended for detection of Syntaxin 19 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], 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 Syntaxin family members.

Syntaxin 19 (S-16) is also recommended for detection of Syntaxin 19 in additional species, including equine and canine.

Suitable for use as control antibody for Syntaxin 19 siRNA (h): sc-77905, Syntaxin 19 siRNA (m): sc-153993, Syntaxin 19 shRNA Plasmid (h): sc-77905-SH, Syntaxin 19 shRNA Plasmid (m): sc-153993-SH, Syntaxin 19 shRNA (h) Lentiviral Particles: sc-77905-V and Syntaxin 19 shRNA (m) Lentiviral Particles: sc-153993-V.

Molecular Weight of Syntaxin 19: 34 kDa.

Positive Controls: mouse brain extract: sc-2253.

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). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (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.