

Syntaxin 3 (M-19): sc-47436

BACKGROUND

Correct vesicular transport is essential to the survival of eukaryotic cells. This process is determined by specific pairing of vesicle-associated SNAREs (v-SNAREs) with those on the target membrane (t-SNAREs). This complex then recruits soluble NSF attachment proteins (SNAPs) and N-ethylmaleimide-sensitive factor (NSF) to form the highly stable SNAP receptor (SNARE) complex. The formation of a SNARE complex pulls the vesicle and target membrane together and may provide the energy to drive fusion of the lipid bilayers. Syntaxins, a family of proteins involved in the fusion of synaptic vesicles with the plasma membrane, display broad tissue distribution and contain carboxy-terminal hydrophobic domains that direct themselves to their respective intracellular compartments. Syntaxin 3 localizes to the apical plasma membrane and is involved in membrane fusion of apical trafficking pathways. Syntaxin 3 is a key factor in the growth of neurites, and it also functions as a direct target for arachidonic acid. Human Syntaxin 3 has two forms: Syntaxin 3A and 3B, while the mouse version has four forms: 3A, 3B, 3C and 3D.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: STX3 (human) mapping to 11q12.1; Stx3a (mouse) mapping to 19 A.

SOURCE

Syntaxin 3 (M-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of Syntaxin 3 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-47436 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Syntaxin 3 (M-19) is recommended for detection of Syntaxin 3 isoform A 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).

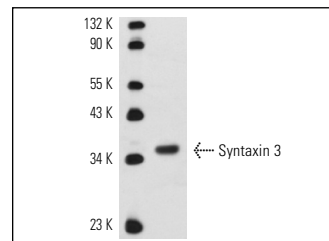
Syntaxin 3 (M-19) is also recommended for detection of Syntaxin 3 isoform A in additional species, including equine, bovine and porcine.

Suitable for use as control antibody for Syntaxin 3 siRNA (h): sc-41328, Syntaxin 3 siRNA (m): sc-41329, Syntaxin 3 shRNA Plasmid (h): sc-41328-SH, Syntaxin 3 shRNA Plasmid (m): sc-41329-SH, Syntaxin 3 shRNA (h) Lentiviral Particles: sc-41328-V, Syntaxin 3 shRNA (m) Lentiviral Particles: sc-41329-V.

Molecular Weight of Syntaxin 3: 37 kDa.

Positive Controls: H4 cell lysate: sc-2408.

DATA



Syntaxin 3 (M-19): sc-47436. Western blot analysis of Syntaxin 3 expression in H4 whole cell lysate.

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.



Try **Syntaxin 3 (D-5): sc-393518**, our highly recommended monoclonal alternative to Syntaxin 3 (M-19).