

Syntaxin 17 (C-12): sc-107093

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 17, also known as STX17, is a 302 amino acid single-pass type IV membrane protein that contains one t-SNARE coiled-coil homology domain and belongs to the syntaxin family. Thought to localize to the endoplasmic reticulum, Syntaxin 17 plays a role in vesicle trafficking to lysosomes and may be involved in processes related to cell division. The gene encoding Syntaxin 17 maps to human chromosome 9, which houses over 900 genes and comprises nearly 4% of the human genome. Hereditary hemorrhagic telangiectasia, which is characterized by harmful vascular defects, and Familial dysautonomia, are both associated with chromosome 9. Notably, chromosome 9 encompasses the largest interferon family gene cluster.

REFERENCES

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- Steegmaier, M., et al. 2000. Syntaxin 17 is abundant in steroidogenic cells and implicated in smooth endoplasmic reticulum membrane dynamics. *Mol. Biol. Cell* 11: 2719-2731.
- Zhang, Q., et al. 2005. The subcellular localization of Syntaxin 17 varies among different cell types and is altered in some malignant cells. *J. Histochem. Cytochem.* 53: 1371-1382.
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CHROMOSOMAL LOCATION

Genetic locus: STX17 (human) mapping to 9q31.1; Stx17 (mouse) mapping to 4 B1.

SOURCE

Syntaxin 17 (C-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of Syntaxin 17 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-107093 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Syntaxin 17 (C-12) is recommended for detection of Syntaxin 17 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 17 (C-12) is also recommended for detection of Syntaxin 17 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for Syntaxin 17 siRNA (h): sc-92492, Syntaxin 17 siRNA (m): sc-153992, Syntaxin 17 shRNA Plasmid (h): sc-92492-SH, Syntaxin 17 shRNA Plasmid (m): sc-153992-SH, Syntaxin 17 shRNA (h) Lentiviral Particles: sc-92492-V and Syntaxin 17 shRNA (m) Lentiviral Particles: sc-153992-V.

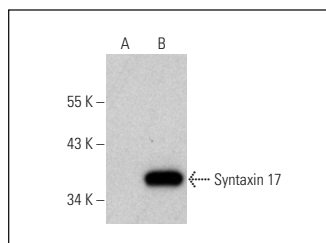
Molecular Weight of Syntaxin 17: 38 kDa.

Positive Controls: Syntaxin 17 (h): 293T Lysate: sc-111944.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA



Syntaxin 17 (C-12): sc-107093. Western blot analysis of Syntaxin 17 expression in non-transfected: sc-117752 (A) and human Syntaxin 17 transfected: sc-111944 (B) 293T whole cell lysates.

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.