

Syntaxin 17 (A-11): sc-518187

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

- Hay, J.C., et al. 1997. Protein interactions regulating vesicle transport between the endoplasmic reticulum and Golgi apparatus in mammalian cells. *Cell* 89: 149-158.
- Steegmaier, M., et al. 1998. Three novel proteins of the syntaxin/SNAP-25 family. *J. Biol. Chem.* 273: 34171-34179.
- Hay, J.C., et al. 1998. Localization, dynamics, and protein interactions reveal distinct roles for ER and Golgi SNAREs. *J. Cell Biol.* 141: 1489-1502.
- 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.

CHROMOSOMAL LOCATION

Genetic locus: STX17 (human) mapping to 9q31.1.

SOURCE

Syntaxin 17 (A-11) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 27-49 of Syntaxin 17 of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Syntaxin 17 (A-11) is available conjugated to agarose (sc-518187 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-518187 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-518187 PE), fluorescein (sc-518187 FITC), Alexa Fluor® 488 (sc-518187 AF488), Alexa Fluor® 546 (sc-518187 AF546), Alexa Fluor® 594 (sc-518187 AF594) or Alexa Fluor® 647 (sc-518187 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-518187 AF680) or Alexa Fluor® 790 (sc-518187 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

Syntaxin 17 (A-11) is recommended for detection of Syntaxin 17 of human origin by Western Blotting (starting dilution 1:100, 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).

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

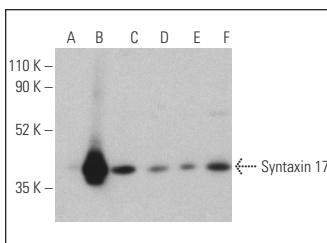
Molecular Weight of Syntaxin 17: 38 kDa.

Positive Controls: Syntaxin 17 (h): 293T Lysate: sc-111944, Jurkat whole cell lysate: sc-2204 or RT-4 whole cell lysate: sc-364257.

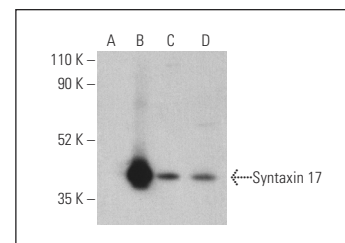
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



Syntaxin 17 (A-11): sc-518187. Western blot analysis of Syntaxin 17 expression in non-transfected 293T: sc-117752 (A), human Syntaxin 17 transfected 293T: sc-111944 (B), Jurkat (C), A549 (D), U-251-MG (E) and RT-4 (F) whole cell lysates. Detection reagent used: m-IgG₁ BP-HRP: sc-525408.



Syntaxin 17 (A-11): sc-518187. Western blot analysis of Syntaxin 17 expression in non-transfected 293T: sc-117752 (A), human Syntaxin 17 transfected 293T: sc-111944 (B), Jurkat (C) and RT-4 (D) whole cell lysates. Detection reagent used: m-IgG Fc BP-HRP: sc-525409.

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.

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