

# Syntaxin 5 (N-17): sc-26090

## 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 5 has a short transmembrane domain that directs this protein for *cis*-Golgi localization. Syntaxin 5 associates with p97 to regulate the assembly of transitional ER. Syntaxin 5 also exists in a SNARE complex containing Golgi Snare (GS) 28, GS15, and Ykt6.

## REFERENCES

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- Watson, R.T. and Pessin, J.E. 2001. Transmembrane domain length determines intracellular membrane compartment localization of syntaxins 3, 4, and 5. *Am. J. Physiol. Cell Physiol.* 281: C215-C223.
- Xu, Y., Martin, S., James, D.E. and Hong, W. 2002. GS15 forms a SNARE complex with syntaxin 5, GS28, and Ykt6 and is implicated in traffic in the early cisternae of the Golgi apparatus. *Mol. Biol. Cell* 13: 3493-3507.
- LocusLink Report (LocusID: 6811) <http://www.ncbi.nlm.nih.gov/LocusLink/>

## CHROMOSOMAL LOCATION

Genetic locus: STX5 (human) mapping to 11q12.3; Stx5a (mouse) mapping to 19 A.

## SOURCE

Syntaxin 5 (N-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of Syntaxin 5 of human origin.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## 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-26090 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

Syntaxin 5 (N-17) is recommended for detection of Syntaxin 5 of human and, to a lesser extent, mouse and rat 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).

Syntaxin 5 (N-17) is also recommended for detection of Syntaxin 5 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for Syntaxin 5 siRNA (h): sc-106586, Syntaxin 5 siRNA (m): sc-153994, Syntaxin 5 shRNA. Plasmid (h): sc-106586-SH, Syntaxin 5 shRNA Plasmid (m): sc-153994-SH, Syntaxin 5 shRNA (h) Lentiviral Particles: sc-106586-V and Syntaxin 5 shRNA (m) Lentiviral Particles: sc-153994-V.

Molecular Weight of Syntaxin 5: 35/42 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.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.