SYSY Synaptic Systems

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Syntaxin 8

Cat.No. 110-8P; control protein, 100 µg protein (lyophilized)

Data Sheet

Reconstitution/ Storage	100 μg protein, lyophilized. For reconstitution add 100 $\mu l H_2O$ to get a 1mg/ml solution in TBS. Then aliquot and store at -20°C until use.
Immunogen	Recombinant protein corresponding to AA 1 to 215 from rat Syntaxin8 (UniProt Id: Q9Z2Q7)
Recommended dilution	Optimal concentrations should be determined by the end-user.
matching antibodies	110 083
Remarks	This control protein consists of the recombinant protein (aa 1 - 215) that has been used for immunization. It has been tested in preadsorption experiments and blocks efficiently and specifically the corresponding signal in Western blots. The amount of protein needed for efficient blocking depends on the titer and on the affinity of the antibody to the antigen.

TO BE USED IN VITRO / FOR RESEARCH ONLY NOT TOXIC, NOT HAZARDOUS, NOT INFECTIOUS, NOT CONTAGIOUS

Syntaxin 8, a member of the SNARE family of proteins, is functionally related to the C-terminus of SNAP 25. Syntaxin 8 is localized to endosomal membranes of a wide variety of cells and is involved in the fusion of late endosomes and lysosomes. In endosomal membranes, syntaxin 8 forms complexes with endobrevin, syntaxin 7 and vti1b.

Selected General References

The N-terminal domains of syntaxin 7 and vti1b form three-helix bundles that differ in their ability to regulate SNARE complex assembly.

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Crystal structure of the endosomal SNARE complex reveals common structural principles of all SNAREs. Antonin W, Fasshauer D, Becker S, Jahn R, Schneider TR Nature structural biology (2002) 9(2): 107-11.

Preferential association of syntaxin 8 with the early endosome. Subramaniam VN, Loh E, Horstmann H, Habermann A, Xu Y, Coe J, Griffiths G, Hong W Journal of cell science (2000) 113 (Pt 6): 997-1008.

A SNARE complex mediating fusion of late endosomes defines conserved properties of SNARE structure and function. Antonin W, Holroyd C, Fasshauer D, Pabst S, Von Mollard GF, Jahn R The EMBO journal (2000) 19(23): 6453-64.

Differential roles of syntaxin 7 and syntaxin 8 in endosomal trafficking. Prekeris R, Yang B, Oorschot V, Klumperman J, Scheller RH Molecular biology of the cell (1999) 10(11): 3891-908.