

Syntaxin 1B

Cat.No. 110 403; Polyclonal rabbit antibody, 50 µg specific antibody (lyophilized)

Data Sheet

Reconstitution/ Storage	50 µg specific antibody, lyophilized. Affinity purified with the immunogen. Rabbit serum albumin was added for stabilization. For reconstitution add 50 µl H ₂ O to get a 1mg/ml solution in PBS. Then aliquot and store at -20°C until use.
Applications	WB: 1 : 1000 (AP staining) IP: yes ICC: 1 : 100 up to 1 : 1000 IHC: 1 : 1000 IHC-P/FFPE: 1 : 500 ELISA: yes (see remarks)
Immunogen	Synthetic peptide corresponding to AA 171 to 187 from rat Syntaxin1B (UniProt Id: P61265)
Reactivity	Reacts with: human (P61266), rat, mouse (P61264), hamster, cow, pig, chicken, zebrafish. Other species not tested yet.
Specificity	Specific for syntaxin 1B, no cross reactivity to syntaxin 1A. (K.O. verified)
matching control	110-1BP
Remarks	ELISA: Suitable as detector antibody for sandwich-ELISA with cat. no. 110 011 as capture antibodies (protocol for sandwich-ELISA).

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

Syntaxin 1, also known as **p35**, is a small integral membrane protein that is abundantly expressed in neurons and neuroendocrine cells. It was initially discovered as HPC-1. Syntaxin 1 is an essential component of the exocytotic fusion machine and interacts with several other proteins important for synaptic function, including its partners in the fusion complex synaptobrevin, SNAP 25, α-SNAP, synaptotagmin 1, Munc 18/n-Sec1 and Ca²⁺-channels. Syntaxin 1 is localized primarily to the neuronal plasmalemma and is concentrated in synapses where pools of the protein are also present on recycling organelles including synaptic vesicles. It is the main target of one of the Botulinum neurotoxins BoNT/C1 which, however, cannot cleave the protein when complexed with its partner proteins in the fusion complex.

Selected References SYSY Antibodies

Titration of Syntaxin1 in mammalian synapses reveals multiple roles in vesicle docking, priming, and release probability. Arancillo M, Min SW, Gerber S, Münster-Wandowski A, Wu YJ, Herman M, Trimbuch T, Rah JC, Ahnert-Hilger G, Riedel D, Südhof TC, et al.

The Journal of neuroscience : the official journal of the Society for Neuroscience (2013) 33(42): 16698-714. **WB, ICC**

Changes in synaptic proteins precede neurodegeneration markers in preclinical Alzheimer's disease cerebrospinal fluid. Lleó A, Núñez-Llaves R, Alcolea D, Chiva C, Balateu-Pañós D, Colom-Cadena M, Gomez-Giro G, Muñoz L, Querol-Vilaseca M, Pegueroles J, Rami L, et al.

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