

Synaptotagmin 11

Cat.No. 270 003; 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 IP: not tested yet ICC: yes IHC: not tested yet IHC-P/FFPE: not tested yet
Immunogen	Recombinant protein corresponding to AA 70 to 154 from mouse Synaptotagmin11 (UniProt Id: Q9R0N3)
Reactivity	Reacts with: rat (O08835), mouse (Q9R0N3). Other species not tested yet.
Specificity	Specific for synaptotagmin 11. (K.D. verified)
matching control	270-0P

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

Up to now at least 17 synaptotagmins have been identified. **Synaptotagmin 11**, a close relative of synaptotagmin 4, is mainly expressed in the brain. It is composed of a vesicular, a transmembrane and two C2 domains. Only the C2B domain is able to bind calcium. In the C2A domain one of the calcium binding aspartates has been substituted for serine leading to a loss of its binding capabilities. Synaptotagmin 11 has been shown to localize mainly to excitatory and inhibitory presynaptic terminals.

Selected References SYSY Antibodies

Injured astrocytes are repaired by Synaptotagmin XI-regulated lysosome exocytosis.
Sreetama SC, Takano T, Nedergaard M, Simon SM, Jaiswal JK
Cell death and differentiation (2016) 23(4): 596-607. **WB, ICC; tested species: mouse**

A novel method for culturing stellate astrocytes reveals spatially distinct Ca²⁺ signaling and vesicle recycling in astrocytic processes.

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The Journal of general physiology (2017) 149(1): 149-170. **ICC, WB**

Activity-dependent formation of a vesicular inhibitory amino acid transporter gradient in the superior olivary complex of NMRI mice.

Ebbers L, Weber M, Nothwang HG
BMC neuroscience (2017) 18(1): 75. **IHC; tested species: mouse**

Synaptotagmin-11 inhibits cytokine secretion and phagocytosis in microglia.
Du C, Wang Y, Zhang F, Yan S, Guan Y, Gong X, Zhang T, Cui X, Wang X, Zhang CX
Glia (2017) 65(10): 1656-1667. **WB; KD verified; tested species: mouse**

Selected General References

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Yeo H, Kim HW, Mo J, Lee D, Han S, Hong S, Koh MJ, Sun W, Choi S, Rhyu IJ, Kim H, et al.
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Differential mRNA expression patterns of the synaptotagmin gene family in the rodent brain.
Mittelsteadt T, Seifert G, Álvarez-Barón E, Steinhäuser C, Becker AJ, Schoch S
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Synaptotagmin XI as a candidate gene for susceptibility to schizophrenia.
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American journal of medical genetics. Part B, Neuropsychiatric genetics : the official publication of the International Society of Psychiatric Genetics (2007) 144B(3): 332-40.

Screening for mutations in synaptotagmin XI in Parkinson's disease.
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The autosomal recessive juvenile Parkinson disease gene product, parkin, interacts with and ubiquitinates synaptotagmin XI.
Huynh DP, Scoles DR, Nguyen D, Pulst SM
Human molecular genetics (2003) 12(20): 2587-97.