

Synaptotagmin 7

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The calcium-binding loops of the tandem C2 domains of synaptotagmin VII cooperatively mediate calcium-dependent

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Distinct self-oligomerization activities of synaptotagmin family. Unique calcium-dependent oligomerization properties of synaptotagmin VII.

Fukuda M, Mikoshiba K

The Journal of biological chemistry (2000) 275(36): 28180-5.

Cat.No. 105-71P; control protein, 100 µg protein (lyophilized)

Data Sheet

Reconstitution/ Storage	100 μg protein, lyophilized. For reconstitution add 100 μl H₂O to get a 1mg/ml solution in TBS. Then aliquot and store at -20°C until use.
Immunogen	Recombinant protein corresponding to AA 46 to 133 from rat Synaptotagmin7 (UniProt Id: Q62747)
Recommended dilution	Optimal concentrations should be determined by the end-user.
matching antibodies	105 173
Remarks	This control protein consists of the Strep-Tag® fusion protein (aa 46 - 133 of rat synaptotagmin 7) 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

Synaptotagmin 7 is a proposed regulator of Ca²⁺ dependent exocytosis like neurotransmitter release. It occurs in several splicing variants which are expressed in a developmentally regulated pattern in brain. The distinct roles for the alternative splicing isoforms have not yet been determined. Synaptotagmin 7 shows Ca²⁺ dependent oligomerization via its own C2 domains leading to the formation of large linear structures which reside at the fusion site of vesicles and plasma membrane. These oligomers may be involved in the modulation of Ca^{2+} dependent exocytosis by opening or dilating fusion pores.