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Synaptotagmin 1 lumenal domain

Cat.No. 105-1P; control peptide, 100 µg peptide (lyophilized)

Data Sheet

Reconstitution/ Storage	100 μg peptide, lyophilized. For reconstitution add 100 μl H ₂ O to get a 1mg/ml solution in PBS. Then aliquot and store at -20°C until use. Control peptides should also be stored at -20°C when still lyophilized!
Immunogen	Synthetic peptide corresponding to AA 1 to 19 from rat Synaptotagmin1 (UniProt Id: P21707)
Recommended dilution	Optimal concentrations should be determined by the end-user.
Remarks	This control peptide consists of the synthetic peptide (aa 1 - 19 of rat synaptotagmin 1) 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 peptide 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 1 also known as **p65**, is an integral membrane glycoprotein of neuronal synaptic vesicles and secretory granules of neuroendocrine cells that is widely (but not ubiquitously) expressed in the central and peripheral nervous system. It has a variable N-terminal domain that is exposed to the lumen of the vesicle and a conserved cytoplasmic tail that contains two Ca²⁺-binding C2-domains. Ca²⁺-binding to synaptotagmin triggers exocytosis of synaptic vesicles, thus linking Ca²⁺-influx during depolarization to neurotransmitter release.

Lumenal antibodies were used in living neurons to label synaptic vesicles from the outside via endocytotic uptake.

Selected General References

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