

Synaptotagmin 1 cytoplasmic tail

Cat.No. 105 011BT; Monoclonal mouse antibody, 100 µg purified IgG (lyophilized)

Data Sheet

Reconstitution/ Storage	100 µg purified IgG, lyophilized, biotin-labeled. . 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.
Applications	WB: 1 : 1000 (AP staining) (see remarks) IP: yes ICC: 1 : 100 up to 1 : 500 IHC: 1 : 500 IHC-P/FFPE: 1 : 500
Label	biotin
Clone	41.1
Subtype	IgG2a (κ light chain)
Immunogen	Recombinant protein corresponding to AA 80 to 421 from rat Synaptotagmin1 (UniProt Id: P21707)
Epitop	Epitop: AA 150 to 240 from rat Synaptotagmin1 (UniProt Id: P21707)
Reactivity	Reacts with: human (P21579), rat (P21707), mouse (P46096), mammals, zebrafish. Other species not tested yet.
Specificity	Specific for mammalian synaptotagmin 1, no cross-reactivity to other synaptotagmins. (K.O. verified)
Remarks	WB: Use only non-boiled samples when running SDS-PAGE. Since synaptotagmin 1 is unevenly expressed in neuronal subpopulations and may, in fact, be missing from some, it is less well suited as a general marker for synapses.

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

Selected General References

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