

Product datasheet for **TA328891**

Syt1 Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	WB
Recommended Dilution:	WB: 1:200-1:2000; IHC: 1:100-1:3000
Reactivity:	Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	Peptide MVSASHPEALAAPVTTVAT(C), corresponding to amino acid residues 1-19 of rat synaptotagmin I. Intravesicular, N-terminus.
Formulation:	Lyophilized. Concentration before lyophilization ~0.8mg/ml (lot dependent, please refer to CoA along with shipment for actual concentration). Buffer before lyophilization: Phosphate buffered saline (PBS), pH 7.4, 1% BSA, 5% sucrose, 0.025% NaN ₃ .
Reconstitution Method:	Add 50 ul double distilled water (DDW) to the lyophilized powder.
Purification:	Affinity purified on immobilized antigen.
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Gene Name:	synaptotagmin 1
Database Link:	NP_001028852 Entrez Gene 20979 Mouse Entrez Gene 25716 Rat P21707



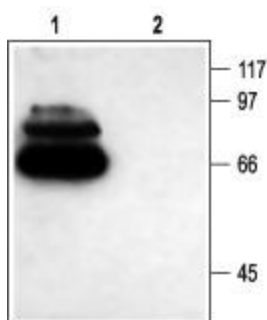
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Background:

Synaptotagmin 1 is a member of the Ca²⁺-binding synaptotagmin family of proteins that includes 16 members in vertebrates and is involved in regulated exocytosis and trafficking. Synaptotagmins are type I membrane proteins located in intracellular vesicles and consist of a short N-terminal domain located in the vesicle lumen, a transmembrane domain and a cytosolic domain containing two Ca²⁺ binding domains. Synaptotagmins are usually localized to distinct secretory vesicles and control their Ca²⁺-dependent fusion. Synaptotagmin I is predominantly expressed in neuronal cells and is an abundant constituent of synaptic vesicles. Synaptotagmin I has a relatively low Ca²⁺ affinity and is able to bind Ca²⁺ mostly in the vicinity of Ca²⁺ channels pores. Indeed, Synaptotagmin I has been demonstrated to directly interact with selected Ca²⁺ channels. Synaptotagmin I also binds to the t-SNARE protein Syntaxin 1 in a Ca²⁺-dependent manner thus forming the prototypical Ca²⁺-dependent fast synaptic vesicle exocytosis protein complex that also includes SNAP-25 and VAMP.

Synonyms:

DKFZp781D2042; P65; SVP65; SYT; Syt1

Product images:

Western blot analysis of rat brain membranes: 1. Anti-Synaptotagmin-I antibody, (1:200). 2. Anti-Synaptotagmin-I antibody, preincubated with the control peptide antigen.