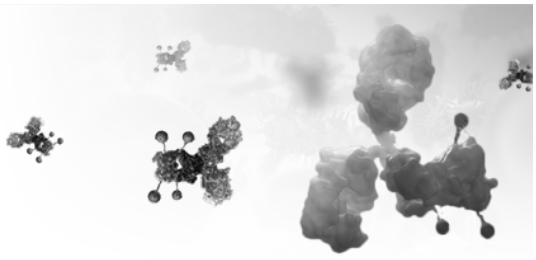

Mouse anti-Rat Synaptotagmin monoclonal antibody, clone 52 (CABT-B9332)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Immunogen	Rat Synaptotagmin aa. 72-223
Isotype	IgG1
Source/Host	Mouse
Species Reactivity	Rat, Human
Clone	52
Purification	The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.
Conjugate	Unconjugated
Applications	WB; IF; IHC; IP
Format	Liquid
Concentration	250 μg/ml
Size	50 μg, 150 μg
Buffer	Aqueous buffered solution containing BSA, glycerol, and ≤0.09% sodium azide.
Storage	Store undiluted at -20°C.

BACKGROUND

Introduction	Synaptotagmin (p65) is an abundant synaptic vesicle protein that contains a single

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transmembrane region and two copies of an internal repeat that is homologous to the regulatory region of Protein Kinase C. It appears that synaptotagmin has a regulatory role in the synaptic vesicle pathway, particularly in vesicle docking and/or fusion with the plasmalemma. A model has been proposed to explain docking, activation, and fusion of synaptic vesicles with donor membranes. This model suggests that VAMP/synaptobrevin and synaptotagmin (vSNARE) on the synaptic vesicle, and SNAP-25 and syntaxin (tSNAREs) on the plasma membrane, interact to form a 7S complex. Two additional soluble proteins, αSNAP and NSF, are later added to the 7S complex, accompanied by the loss of synaptotagmin. The resulting 20S complex contains syntaxin, SNAP-25, VAMP, αSNAP, and NSF. Genetic studies in several species demonstrate that mutation or deletion of synaptotagmin results in a large decrease in Ca2+ triggered transmitter release. Mammalian synapses that lack synaptotagmin show a selective decrease in a fast component of release, suggesting that synaptotagmin is the Ca2+ sensor triggering exocytosis.

Keywords	DKFZp781D2042; P65; SVP65; Synaptotagmin I; Synaptotagmin II; Synaptotagmin IV; Synaptotagmin V; SYT 1; SYT; SYT1; SYT2; SYT3; SYT4; SYT5; SytI;

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