ANTIBODIES ONLINE

Datasheet for ABIN967965

anti-Synaptotagmin antibody (AA 72-223)

1 Image | 5 Publications

Go to Product page

Overview

Quantity:	50 µg
Target:	Synaptotagmin (SYT)
Binding Specificity:	AA 72-223
Reactivity:	Rat
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This Synaptotagmin antibody is un-conjugated
Application:	Western Blotting (WB)

Product Details

Immunogen:	Rat Synaptotagmin
Clone:	BC17
Isotype:	IgG1
Cross-Reactivity:	Human
Characteristics:	1. Since applications vary, each investigator should titrate the reagent to obtain optimal results. 2. Please refer to us for technical protocols. 3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing. 4. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
Purification:	Purified from tissue culture supernatant or ascites by affinity chromatography.

 Copyright antibodies-online. All rights reserved.

Target Details

Target:	Synaptotagmin (SYT)
Alternative Name:	Synaptotagmin (SYT Products)
Background:	Synaptotagmin (p65) is an abundant synaptic vesicle protein that contains a single 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, alphaSNAP and NSF, are later added to the 7S complex, accompanied by the loss of synaptotagmin. The resulting 20S complex contains syntaxin, SNAP-25, VAMP, alphaSNAP, 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.
Molecular Weight:	65 kDa

Application Details

Comment:	Related Products: ABIN968545, ABIN967389
Restrictions:	For Research Use only

Handling

Format:	Liquid
Concentration:	250 µg/ml
Buffer:	Aqueous buffered solution containing BSA, glycerol.
Preservative:	Sodium azide
Precaution of Use:	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C

 Copyright antibodies-online. All rights reserved.

Publications

Product cited in:

Liu, Fallon, Lashuel, Liu, Lansbury: "The UCH-L1 gene encodes two opposing enzymatic activities that affect alpha-synuclein degradation and Parkinson's disease susceptibility." in: **Cell**, Vol. 111, Issue 2, pp. 209-18, (2002) (PubMed).

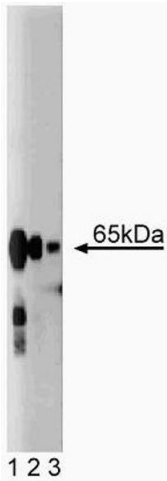
Ramalho-Santos, Moreno, Sutovsky, Chan, Hewitson, Wessel, Simerly, Schatten: "SNAREs in mammalian sperm: possible implications for fertilization." in: **Developmental biology**, Vol. 223, Issue 1, pp. 54-69, (2000) (PubMed).

Duncan, Don-Wauchope, Tapechum, Shipston, Chow, Estibeiro: "High-efficiency Semliki Forest virus-mediated transduction in bovine adrenal chromaffin cells." in: **The Biochemical journal**, Vol. 342 Pt 3, pp. 497-501, (1999) (PubMed).

Scheller: "Membrane trafficking in the presynaptic nerve terminal." in: **Neuron**, Vol. 14, Issue 5, pp. 893-7, (1995) (PubMed).

Perin, Johnston, Ozcelik, Jahn, Francke, Südhof: "Structural and functional conservation of synaptotagmin (p65) in Drosophila and humans." in: **The Journal of biological chemistry**, Vol. 266, Issue 1, pp. 615-22, (1991) (PubMed).

Images



Western Blotting

Image 1. Western blot analysis of Synaptotagmin on rat brain lysate. Lane 1: 1:1000, lane 2: 1:2000, lane 3: 1:4000 dilution of anti-Synaptotagmin.

Copyright antibodies-online. All rights reserved.