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Phospho-Synapsin I (S9) Antibody

Rabbit mAb
Catalog # AP90665

Product Information

Application	WB, IHC
Primary Accession	P17600
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Other Names	Brain protein 4.1; SYN-1; synapsin I;
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	74111

Additional Information

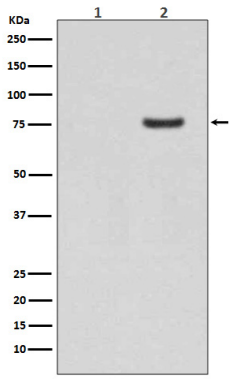
Dilution	WB 1:500~1:2000 IHC 1:50~1:200
Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human Phospho-Synapsin I (S9)
Description	This gene is a member of the synapsin gene family. Synapsins encode neuronal phosphoproteins which associate with the cytoplasmic surface of synaptic vesicles. Family members are characterized by common protein domains, and they are implicated in synaptogenesis and the modulation of neurotransmitter release, suggesting a potential role in several neuropsychiatric diseases.
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

Protein Information

Name	SYN1
Function	Neuronal phosphoprotein that coats synaptic vesicles, and binds to the cytoskeleton. Acts as a regulator of synaptic vesicles trafficking, involved in the control of neurotransmitter release at the pre-synaptic terminal (PubMed:21441247, PubMed:23406870). Also involved in the regulation of axon outgrowth and synaptogenesis (By similarity). The complex formed with NOS1 and CAPON proteins is necessary for specific nitric-oxid functions at a presynaptic level (By similarity).
Cellular Location	Synapse {ECO:0000250|UniProtKB:O88935}. Golgi apparatus {ECO:0000250|UniProtKB:O88935}. Presynapse. Cytoplasmic vesicle, secretory vesicle, synaptic vesicle {ECO:0000250|UniProtKB:P09951}. Note=Dissociates from synaptic vesicles and redistributes into the axon during action potential firing, in a step that precedes fusion of vesicles with

the plasma membrane. Reclusters to presynapses after the cessation of synaptic activity. {ECO:0000250|UniProtKB:P09951}

Images



Western blot analysis of Phospho-Synapsin I (S9) expression in (1) Human brain lysate; (2) Human brain lysate treated with AP.