ARG51751
anti-Synapsin 1 phospho (Ser9) antibody

Package: 100 µl, 50 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes Synapsin 1 phospho (Ser9)
Tested Reactivity	Hu, Ms, Rat
Tested Application	ICC/IF, IHC-Fr, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	Synapsin 1
Species	Rat
Immunogen	Phosphospecific peptide around Ser9 (R-L-S(p)-D-S) of Human Synapsin 1.
Conjugation	Un-conjugated
Alternate Names	SYNI; Brain protein 4.1; Synapsin-1; SYN1a; SYN1b; Synapsin I

Application Instructions

Application table

Application	Dilution
ICC/IF	1:100 - 1:200
IHC-Fr	Assay-dependent
WB	1:500 - 1:1000

Application Note: * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Properties

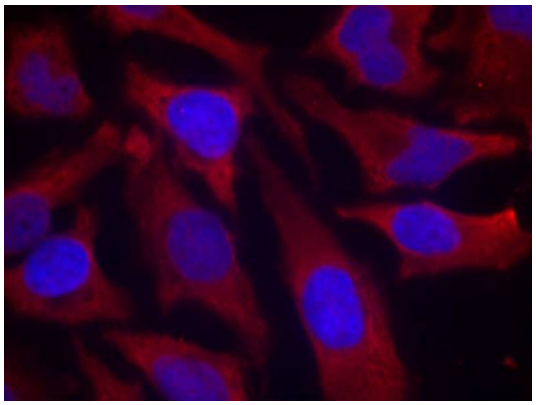
Form	Liquid
Purification	Antibodies were produced by immunizing rabbits with KLH-conjugated synthetic phosphopeptide. Antibodies were purified by affinity-chromatography using epitope-specific phosphopeptide. In addition, non-phospho specific antibodies were removed by chromatogramphy using non-phosphopeptide.
Buffer	PBS (without Mg2+ and Ca2+, pH 7.4), 150mM NaCl, 0.02% Sodium azide and 50% Glycerol.
Preservative	0.02% Sodium azide
Stabilizer	50% Glycerol
Concentration	1 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

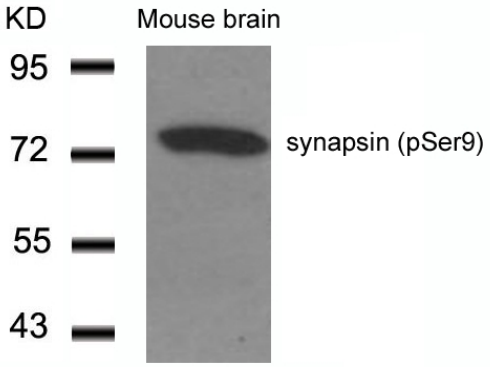
Gene Symbol	SYN1
Gene Full Name	synapsin I
Background	This gene is a member of the synapsin gene family. Synapsins encode neuronal phosphoproteins which associate with the cytoplasmic surface of synaptic vesicles. Family members are characterized by common protein domains, and they are implicated in synaptogenesis and the modulation of neurotransmitter release, suggesting a potential role in several neuropsychiatric diseases. This member of the synapsin family plays a role in regulation of axonogenesis and synaptogenesis. The protein encoded serves as a substrate for several different protein kinases and phosphorylation may function in the regulation of this protein in the nerve terminal. Mutations in this gene may be associated with X-linked disorders with primary neuronal degeneration such as Rett syndrome. Alternatively spliced transcript variants encoding different isoforms have been identified. [provided by RefSeq, Jul 2008]
Function	Neuronal phosphoprotein that coats synaptic vesicles, binds to the cytoskeleton, and is believed to function in the regulation of neurotransmitter release. The complex formed with NOS1 and CAPON proteins is necessary for specific nitric-oxid functions at a presynaptic level. [UniProt]
Research Area	Neuroscience antibody
Calculated Mw	74 kDa
PTM	Substrate of at least four different protein kinases. It is probable that phosphorylation plays a role in the regulation of synapsin-1 in the nerve terminal. Phosphorylation at Ser-9 dissociates synapsins from synaptic vesicles.

Images



ARG51751 anti-Synapsin 1 phospho (Ser9) antibody ICC/IF image

Immunofluorescence: Methanol-fixed HeLa cells stained with ARG51751 anti-Synapsin 1 phospho (Ser9) antibody.



ARG51751 anti-Synapsin 1 phospho (Ser9) antibody WB image

Western blot: Extracts from Mouse brain tissue stained with ARG51751 anti-Synapsin 1 phospho (Ser9) antibody.