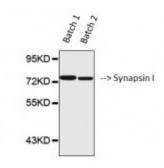


Anti-Synapsin I antibody



Western Blot (WB) analysis of HeLa cell lysate using Synapsin I antibody (STJ95848) from 2 batches.



Description Synapsin I is a protein encoded by the SYN1 gene which is approximately

74,1 kDa. Synapsin I is localised to the Golgi apparatus and cell junction. It is involved in the neurotransmitter release cycle, MAPK-Erk pathway and the brain-derived neurotrophic factor signalling pathway. It is a neuronal phosphoprotein that coats synaptic vesicles, binds to the cytoskeleton and is believed to function in the regulation of neurotransmitter release. It forms a complex with NOS1 and CAPON proteins and is necessary for specific nitric-oxide functions at a presynaptic level. Synapsin I is expressed in the nervous system, adrenal gland and eye. Mutations in the SYN1 gene may result in X-linked epilepsy. STJ95848 was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen. This polyclonal antibody detects endogenous levels of synapsin I protein.

Model STJ95848

Host Rabbit

Reactivity Human, Mouse, Rat

Applications ELISA, IF, IHC, WB

Immunogen Synthesized peptide derived from human Synapsin I around the non-

phosphorylation site of S9.

Immunogen Region 1-80 aa

Gene ID 6853

Gene Symbol SYN1

Dilution range WB 1:500-1:2000IHC 1:100-1:300IF 1:200-1:1000ELISA 1:20000

Specificity Synapsin I Polyclonal Antibody detects endogenous levels of Synapsin I

protein.

Purification The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Note For Research Use Only (RUO).

Protein Name Synapsin-1 Brain protein 4.1 Synapsin I

Molecular Weight 77 kDa

Clonality Polyclonal

Conjugation Unconjugated

Isotype IgG

Formulation Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Concentration 1 mg/ml

Storage Instruction Store at -20°C, and avoid repeat freeze-thaw cycles.

Database Links HGNC:11494OMIM:300491

Alternative Names Synapsin-1 Brain protein 4.1 Synapsin I

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.

Sequence and Domain Family The A region binds phospholipids with a preference for negatively charged

species.

Cellular Localization Cell junction, synapse. Golgi apparatus

Post-translational

Modifications

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.

St John's Laboratory Ltd

F +44 (0)207 681 2580

T+44 (0)208 223 3081

W http://www.stjohnslabs.com/ E info@stjohnslabs.com