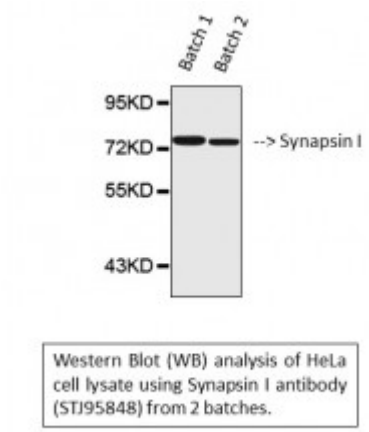
Anti-Synapsin I antibody



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.