Product Name: Synapsin-1 Rabbit Polyclonal Antibody
Catalog #: APRab18493

Summary

Production Name	Synapsin-1 Rabbit Polyclonal Antibody
Description	Rabbit Polyclonal Antibody
Host	Rabbit
Application	WB,
Reactivity	Human,Mouse,Rat

Performance

Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
Buffer	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Purification	Affinity purification

Immunogen

Gene Name	SYN1
Alternative Names	SYN1; Synapsin-1; Brain protein 4.1; Synapsin I
Gene ID	6853.0
SwissProt ID	P17600.Synthesized peptide derived from the Internal region of human Synapsin-1.

Application

Dilution Ratio	WB 1:500-2000;; ELISA 2000-20000
Molecular Weight	75kD

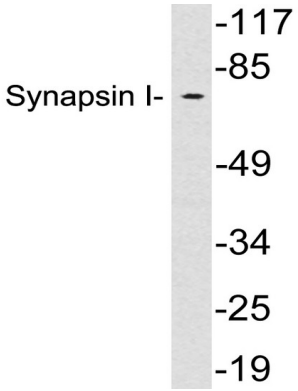
Background

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],disease:Defects in SYN1 are a cause of epilepsy X-linked with variable learning disabilities and behavior disorders [MIM:300491]. XELBD is characterized by variable combinations of epilepsy, learning difficulties, macrocephaly, and aggressive behavior.,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.,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. Phosphorylated upon DNA damage, probably by ATM or ATR.,similarity:Belongs to the synapsin family.,subunit:Homodimer. Interacts with CAPON. Forms a ternary complex with NOS1. Isoform Ib interacts with PRNP.,

Research Area

Image Data



Western blot analysis of lysates from HeLa cells, using Synapsin I antibody.

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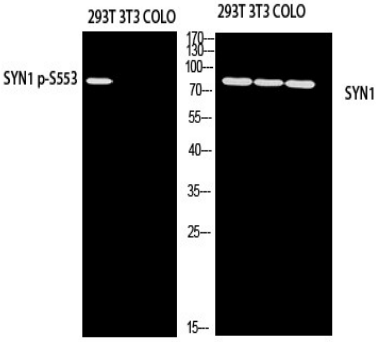
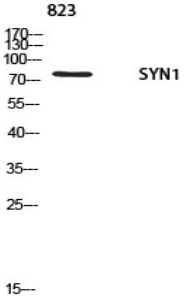
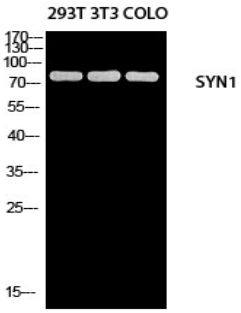


Western blot analysis of 293T 3T3 COLO using SYN1 antibody. Antibody was diluted at 1:1000. Secondary antibody was diluted at 1:20000



Western blot analysis of 823 using SYN1 antibody. Antibody was diluted at 1:1000. Secondary antibody was diluted at 1:20000



Western blot analysis of 293T 3T3 COLO using SYN1 antibody. Antibody was diluted at 1:1000. Secondary antibody was diluted at 1:20000

Note

For research use only.