



# Recombinant Rat Synapsin-1 (Syn1)

<b>Product Code</b>	CSB-MP023002RA
<b>Storage</b>	Store at -20°C, for extended storage, conserve at -20°C or -80°C.
<b>Uniprot No.</b>	P09951
<b>Product Type</b>	Recombinant Protein
<b>Immunogen Species</b>	Rattus norvegicus (Rat)
<b>Purity</b>	≥85% (SDS-PAGE)
<b>Sequence</b>	MNYLRRRLSD SNFMANLPNG YMTDLQRPQP PPPPPSAASP GATPGSAAAS AERASTAAPV ASPAAPSPGS SGGGGFFSSL SNAVKQTTAA AAATFSEQVG GGSGGAGRGG AAARVLLVID EPHTDWAKYF KGKKIHGEID IKVEQAEFSD LNLVAHANGG FSVDMEVLRN GVKVVRSLKP DFLIRQHAF SMARNGDYRS LVIGLQYAGI PSVNSLHSVY NFCDKPWFVA QMVRLHKKLG TEEFPLIDQT FYPNHKEMLS STTYPVVVKM GHAHSGMGKV KVDNQHDFQD IASVVALTKT YATAEPFIDA KYDVRVQKIG QNYKAYMRTS VSGNWKTNTG SAMLEQIAMS DRYKLWVDTC SEIFGGLDIC AVEALHGKDG RDHIIIVVGS SMPLIGDHQD EDKQLIVELV VNKMTQALPR QRDASPGRGS HSQTSPGAL PLGRQTSQQP AGPPAQQRPP PQQGPPQGP GPQRQGPPLQ QRPPQGGQQH LSGLGPPAGS PLPQRLPSPT AAPQQSASQA TPMTQGQGRQ SRPVAGGPGA PPAARPPASP SPQRQAGPPQ ATRQASISGP APPKVSGASP GGQQRQGPPQ KPPGPAGPIR QASQAGPGPR TGPPTTQQPR PSGPGPAGRP TKPQLAQKPS QDVPPPIIAA AGGPPHPQLN KSQSLTNAFN LPEPAPPRPS LSQDEVKAET IRSLRKS FAS LFSD
<b>Source</b>	Mammalian cell
<b>Target Names</b>	Syn1
<b>Protein Names</b>	Recommended name: Synapsin-1 Alternative name(s): Synapsin I
<b>Expression Region</b>	1-704
<b>Notes</b>	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
<b>Tag Info</b>	Tag type will be determined during the manufacturing process.
<b>Protein Length</b>	Full length protein
<b>Target Details</b>	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.

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**Reconstitution**

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

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**Shelf Life**

The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself.

Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.