

Recombinant Human Synaptotagmin 1, His-tagged

Cat. No. SYT1-3551H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant human SYT1 protein, fused to His-tag at C-terminus, was expressed in E.coli and purified by using conventional chromatography techniques.
Species	Human
Source	E.coli
Description	Synaptotagmin-1(SYT1) belongs to the synaptotagmin family contains 2 C2 domains. The synaptotagmins are integral membrane proteins of synaptic vesicles thought to serve as Ca(2+) sensors in the process of vesicular trafficking and exocytosis. SYT1 is the master switch responsible for allowing the human brain to release neurotransmitters.
Purity	> 85% by SDS – PAGE.
Formulation	Liquid. In 20mM Tris-HCl buffer (pH 8.0) containing 2mM DTT, 20% glycerol, 100mM NaCl.
Molecular Weight	29.5kDa (256aa), confirmed by MALDI-TOF
Concentration	0.25mg/ml (determined by Bradford assay)
Sequences of amino acids	MEPKEEEKLG KLQYSLDYDF QNNQLLVGII QAAELPALDM GGTSDPYVKV FLLPDKKKKF ETKVHRKTLN PVFNEQFTFK VPYSELGGKT LVMAVYDFDR FSKHDIIGEF KVPMNTVDFG HVTEEWRDLQ SAEKEEQEKL GDICFSLRYV

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PTAGKLTVVI LEAKNLKKMD VGGLSDPYVK IHLMQNGKRL KKKKTTIKKN
 TLNPYYNESF SFEVPFEQIQ KVQVVTVLD YDKIGKND AI GKV FVGYNLE
 HHHHHH

Storage

Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.

GENE INFORMATION

Gene Name [SYT1 synaptotagmin I \[Homo sapiens \]](#)

Synonyms DKFZp781D2042; P65; SVP65; Synaptotagmin I; synaptotagmin-1; SYT; SYT1; sytl

Gene ID [6857](#)

mRNA Refseq [NM_005639](#)

Protein Refseq [NP_005630](#)

MIM [185605](#)

UniProt ID [P21579](#)

Chromosome Location 12cen-q21

Pathway

Acetylcholine Neurotransmitter Release Cycle; Botulinum neurotoxicity; Dopamine Neurotransmitter Release Cycle; Effects of Botulinum toxin; GABA synthesis, release, reuptake and degradation; Glutamate Neurotransmitter Release Cycle; Neurotransmitter Release Cycle; Norepinephrine Neurotransmitter Release Cycle; Serotonin Neurotransmitter Release Cycle; Synaptic Transmission;

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Translocation of BoNT Light chain; Transmission across Chemical Synapses

Function

1-phosphatidylinositol binding; calcium ion binding; calcium-dependent protein binding; calmodulin binding; identical protein binding; low-density lipoprotein particle receptor binding; phospholipid binding; protein binding; syntaxin-1 binding; transporter activity

**PDB rendering
based on 1byn.**

