

## Product datasheet for **SC314473**

### Synapsin I (SYN1) (NM\_006950) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Synapsin I (SYN1) (NM_006950) Human Untagged Clone
Tag:	Tag Free
Symbol:	Synapsin I
Synonyms:	EPILX; MRX50; SYN1a; SYN1b; SYN1
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL6</u>
E. coli Selection:	Ampicillin (100 ug/mL)

**Fully Sequenced ORF:** >OriGene sequence for NM\_006950 edited  
GGAGGTCTATATAAGCAGAGCTCATTAGGTGACACTATAGAATACAAGCTACTTGTCT  
TTTTGCAGCGCCGCGAATTCGGCACGAGGGCGGAGAGTCGTGTCGTGCCTGAGAGCGC  
AGCTGTGCTCCTGGGCACCGCAGTCCGCCCGCGGCTCCTGGCCAGACCACCCCTAG  
GACCCCTGCCCAAGTCGCAGCCATGAACTACCTGCGGCGCGCCTGTGCGACGCAAC  
TTTATGGCCAATCTGCCAAATGGGTACATGACAGACCTGCAGCGTCCGCAGCCGCCCA  
CCGCCCGCGGTGCCACAGCCCGGAGCCACGCCCGTCCCGGGACCGCCACTGCCGAG  
AGGTCCTCCGGGTGCCCCAGCGGCTCTCCGGCCGCCCTAGCCCGGGTCTCGGGG  
GGCGGTGGCTTCTCTCGTCGTGTCACACGCGGTCAAGCAGACCACGGCGGCGGACGT  
GCCACCTCAGCGAGCAGGTGGCGGCGGCTCTGGGGCGCAGGCCGCGGGGAGCCGCC  
TCCAGGGTGTGCTGGTTCATCGACGAGCCGACACCGACTGGGCAAATACTTCAAAGGG  
AAAAGATCCATGGAGAAATTGACATTAAGTAGAACAGCCGAATTCTCTGATCTCAAC  
CTTGTGGCCCATGCCAATGGTGGATTCTCTGTGGATATGGAAGTCTTCGGAATGGGGT  
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GCACGCAACGGAGACTACCGCAGTTTGGTCATTGGGCTGCAGTATGCTGGAATCCCACT  
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CCCAATCACAAGAAATGCTCAGCAGTACAACGTACCCCGTGGTGTGAAGATGGGGCAC  
GCACACTCTGGGATGGCAAGGTCAAGTTGACAACCAGCATGACTTCCAGGACATCGCA  
AGTGTGCTGGCACTGACCAAGAGTATGCCACTGCCGAGCCCTTCATCGATGCCAAATAT  
GACGTGCGTGTCCAGAAGATTGGGCAGAACTACAAGCCCTACATGAGGACGTCAAGTCA  
GGGAAGTGAAGACCAATACTGGCTCTGCGATGCTGGAGCAAATGCCATGTCTGACAGA  
TACAAGCTGTGGGTGGACACGTGCTCAGAGATTTTGGGGACTGGACATCTGCGCAGTG  
GAAGCGCTACATGGCAAGGACGGAAGGGATCACATCATTGAGGTGGTGGTTCTCCATG  
CCGCTCATTGGTGACCACAGGATGAAGACAAACAGCTCATCGTAGAGCTCGTGGTCAAC  
AAGATGGCTCAGGCCCTGCCCGCAGCGACAGCGGGATGCCTCCCTGGCAGGGGCTCC  
CATGGCCAGACTCCGTCGCCAGGGGCCCTGCCCTTGGGCGCCAGACCTCCAGCAGCCC



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GCAGGGCCCCCGGCTCAGCAGCGACCCCCACCACAGGGCGGCCCTCCACAGCCGGGTCCA
GGCCCCCAGCGCCAGGGACCCCCATTGCAGCAGCGCCCGCCCCGCAGGGCCAGCAGCAC
CTTTCAGGCCTTGGACCCCCAGCTGGCAGCCCCCTGCCCCAGCGCCTTCCAAGTCCCACC
TCAGCGCCCCAGCAGCCCCGCGTCCCAGGCCGCGCCGCCGACCCAGGGTCAAGGCCGCCAA
TCCCGGCCAGTGGCGGGAGGCCCGGGGCGCCTCCAGCAGCCCCGCCGCCCGCCTCTCCG
TCTCCCCAGCGCCAGGCGGGCCCCCACAGGCTACCCGTGACACATCCGTCTCTGGCCCCG
GCTCCGCCAAAGGCCTCTGGGGCCCCACCGGGCGGGCAGCAGCGCCAGGGCCCCGCCAG
AAACCCCCAGGCCAGCCGGCCCCACACGCCAGGCCAGCCAGGCGGGTCCCGTGCCCCGC
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ATCCACATCTTCAAATGCCACCCAACACCTAGCCCCACAAGGATTTCCCTTCACCAGTC
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CAGGGACCCCTCCCCAGTTTCTGCTCTGACAGCTGTCTTTAAATATGCAAACCTCAC
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TGTGGTGTCTGTGTCTGTGACTGACGTGGCCTCCTTTTGTGCCGTGCTTGGCATATGTGG
TCCTCGTTTCATCGTGCCGCTGTGGTGTGCGTGCAGTGACGCTGTTTATGTGGTCCGCA
CCTCCCCCTGACCTTCACTCCTTGCTGGACTACCCACCCCTCAGCGGCTCTGAACCC
CAAGAGAAGAGTCGGGAAACAAAATAACAAGCAAAGGCCAGCAAAAAAAAAAAAAAAAAA
A

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- Restriction Sites:** Please inquire
- ACCN:** NM\_006950
- Insert Size:** 3300 bp
- OTI Disclaimer:** Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
- OTI Annotation:** The full-length insert was fully sequenced and ORF exactly matches with that of NM\_006950.2.
- Components:** The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

**Reconstitution Method:**

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

**RefSeq:** [NM\\_006950.2](#), [NP\\_008881.2](#)

**RefSeq Size:** 2248 bp

**RefSeq ORF:** 2118 bp

**Locus ID:** 6853

**UniProt ID:** [P17600](#)

**Cytogenetics:** Xp11.3-p11.23

**Domains:** Synapsin

**Gene Summary:** 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]

Transcript Variant: This variant (1a) represents the longer transcript, and encodes the longer isoform (1a). This isoform (1a) contains a distinct domain E, as compared to isoform 1b.