

Product datasheet for **RG221273**

Synapsin I (SYN1) (NM_006950) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Synapsin I (SYN1) (NM_006950) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Synapsin I
Synonyms:	EPILX; MRX50; SYN1a; SYN1b; SYN1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG221273 representing NM_006950
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCCGCATCGC

ATGAACACTGCGGCGCCGCTGTGCGACAGCAACTTTATGGCCAATCTGCCAAATGGGTACATGACAG
 ACCTGCAGCGTCCGCAGCCGCCCCACCGCCGCCGGTGCCACAGCCCGGAGCCACGCCCGGTCCCGG
 GACCGCCACTGCCGAGAGGTCTCCGGGGTGCAGCCGCGCTCTCGGCCGCCCTAGCCCCGGGTCC
 TCGGGGGCGGTGGCTTCTCTCGTCGCTGTCCACGCGGTCAAGCAGACCACGGCGGGCAGCTGCCA
 CCTTCAGCGAGCAGGTGGCGCGGGCTCTGGGGCGCAGGCCGCGGGGAGCCGCTCCAGGGTGTCTGT
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 GACAGATACAAGCTGTGGGTGGACAGTGTCTCAGAGATTTTGGGGGACTGGACATCTGCCAGTGAAG
 CGCTACATGGCAAGGACGAAGGGATCACATCATTGAGTGGTGGTTTCTCCATGCCGCTCATTGGTGA
 CCACCAGGATGAAGACAAACAGCTCATCGTAGAGCTCGTGGTCAACAAGATGGCTCAGGCCCTGCCCGG
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 GGTCCCCTGCCCCGCACTGGGCCACCCACACGAGCAGCCTCGGCCAGCGGGCCCGGGCCCCGCTGGA
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 GACCTCCGACCCCCAGCTCAACAAATCCAGTCTCTGACCAATGCCCTTCAACCTTCCAGAGCCAGCCCC
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 AGCCTCTCTCCGAC

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

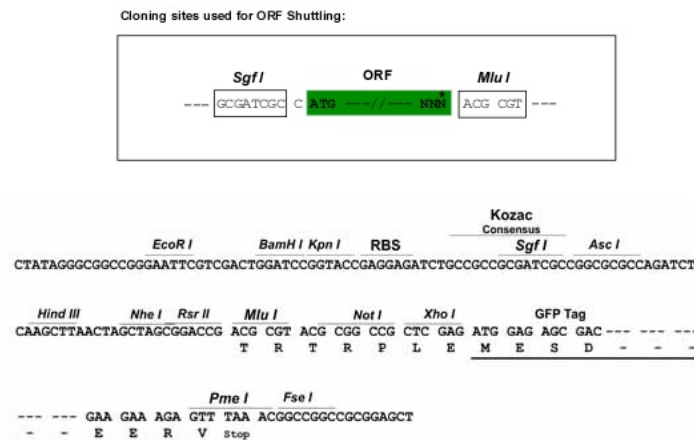
Protein Sequence: >RG221273 representing NM_006950
 Red=Cloning site Green=Tags(s)

MNYLRRRLSDSNFMANLPNGYMTDLQRPQPPPPPPGAHSPGATPGPGTATAERSSGVAPAASPAAPSPGS
 SGGGGFFSSLSNAVKQTAAAAATFSEQVGGSGGAGRGGAASRVLLVIDEPHTDWAKYFKGKKIHGEID
 IKVEQAEFSDLNLVAHANGGFSDMEVLRNGVKVVRSLKPDFVLIRQHAFSMARNGDYRSLVIGLQYAGI
 PSVNSLHSVYNFCDKPWVFAQMVRLHKKLGTEEFPLIDQTFYPNHKEMLSSTTYPVVVKMGHAHSGMGKV
 KVDNQHDFQDIASVVALTKTYATAEPFIDAKYDVRVQKIGQNYKAYMRTSVSGNWKTTNTGSAMLEQIAMS
 DRYKLWVDTCEIFGGLDICAVALHGKDGRDHIIEVVGSSMPLIGDHQDEDKQLIVELVVKMAQALPR
 QRQRDASPRGSHGQTPSPGALPLGRQTSQQPAGPPAQQRPPQGGPPQPGPGPQRQGPPLQQRPPPPQGQ
 QHLSGLGPPAGSPLPQRLPSPTAPQQPASQAAPPTQGGQGRSRPVAGGPGAPPAARPPASPSPPQRQAGP
 PQATRQTSVSGPAPPKASGAPPGQQRQGPQKPPGPAGPTRQASQAGVPRTGPPTTQQPRPSGPGPAG
 RPKPQLAQKPSQDVPPPATAAAGGPPHPQLNKSQSLTNAFNLPEPAPRPSLSQDEVKAETIRSLRKSFA
 SLFSD

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_006950

ORF Size: 2115 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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_006950.3](#)

RefSeq Size: 2248 bp

RefSeq ORF: 2118 bp

Locus ID: 6853

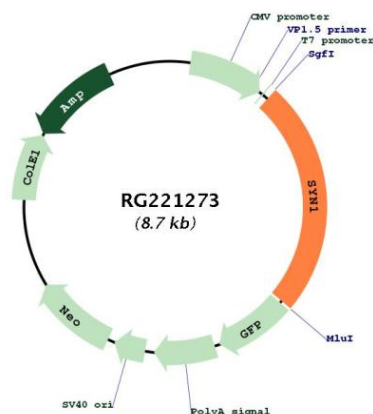
UniProt ID: [P17600](#)

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]

Product images:



Circular map for RG221273