

Product datasheet for **RG219395**

Synapsin III (SYN3) (NM_003490) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Synapsin III (SYN3) (NM_003490) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Synapsin III
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG219395 representing NM_003490
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGAATTTCTCCGGCGACGTCTCTGACAGCAGCTTCATGGCCAACCTGCCTAATGGCTATATGACGG
 ACCTGCAACGCCAGATAGCTCCACCAGCTCACCTGCTTCCCCCGCCATGGAGAGGAGGCCACCCAGCC
 CCTGGCTGCCTCCTTCTCCTCTCCAGGATCCAGCCTTTTGTAGCTCCCTCTCCAGTGCATGAAGCAGGCC
 CCTCAGGCCACCTCAGGACTGATGGAGCCTCCAGGTCCCTCCACGCCATTGTTCAAAGACCCAGGATCC
 TGTGGTGTGATCGATGATGCCATACAGACTGGTGAAGTATTTCCATGGGAAGAAGGTGAATGGAGAGAT
 TGAGATCCGAGTGGAGCAGGCTGAATTCTCAGAGTTGAACCTAGCTGCCTATGTGACCGGGGCTGCATG
 GTGGACATGCAGGTCGTGAGAAATGGGACCAAAGTGGTGAGATCCTTCAAGCCAGACTTCATCCTGGTCC
 GCCAGCATGCCTACAGCATGGCCCTGGGGAAGACTACCGCAGCCTGGTATCGGCTGCAGTATGGAGG
 GCTGCCTGCTCAACTCTCTACTCCGTCTACAACCTTGCAGCAAGCCCTGGGTGTTCTCTCAGCTC
 ATTAAGATCTTCCATTCCCTGGGTCTGAGAAGTTCCTCGTTGTGGAGCAAACATTTTCCCAACCATA
 AGCCAATGGTACAGCCCCACACTTCCCGTGGTGTAGTCAAGCTGGGACATGCCACGCTGGAATGGAAA
 GATCAAAGTGGAAAACAGCTTGACTTCCAGGACATCACAGCCTGGTCCCATGGCCAAAACCTACGCC
 ACCACCGAGGCCCTTATCGACTCCAAGTACGACATCCGCATCCAGAAAATGGATCCAACATAAGGCTT
 ACATGAGAACCTCCATCTCTGGGAACGGAAAGGCCAACACAGGCTCTGCCATGCTGGAGCAGGTGGCCAT
 GACAGAGAGGTACAGGCTGTGGGTGGACAGCTGCTCGAAATGTTGGCGGCTGGACATCTGTGCCGTC
 AAGGCTGTCCACAGCAAGGATGGCAGAGATTACATCATCGAGGTAATGGACAGCTCAATGCCGCTGATTG
 GAGAGCATGTGGAAGAGGACAGACAGCTGATGGCCGACCTTGTGTCTCCAAAATGAGCCAGCTCCCGAT
 GCCAGGAGGCACAGCGCCCTCCCCCTCAGACCTTGGGCTCCACAGATTAATCAGCGAAAATCCCAAGG
 CAAGCCCAGCTGGGGCCTCAGCTAGGCCAGCCCAGCCACGCCACCTCCGCAAGGAGGCCCTCGCCAAG
 CTCAGTCTCCTCAGCCCCAGAGATCTGGAAGCCCTCCCAACAGAGGCTCTCCCAACAGGCCAGCAGCC
 CCTGAGCCCCAGTCCGGATCTCCACAGCAGCAAAGGTACCAGGCTCTCCGAGCTATCCCGGATCC
 AGTGGCAGCTCCCAACCCAGGCCCTCAAGCCAGGTGCCACCCTCGCTCACAGCCCCGGCCCCCTGTGC
 AGGGCCGTAGTACCTCCAGCAGGTTGAAGAGTCCAAGAAGCCAGCACCACCCATCCGCATCTCAACAA
 ATCTCAGTCCCTGACTAACAGCCTCAGCACATCCGACACCTCCAGCGTGGGACCCCAAGTGAAGACGAG
 GCCAAGGCTGAAACCATCCGCAACCTGAGGAAGTCTTTGCCAGCCTGTTCTCTGAC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG219395 representing NM_003490
 Red=Cloning site Green=Tags(s)

MNFLRRRLSDSSFMANLPNGYMTDLQRPDSSTSSPASPAMERRHPQPLAASFSSPGSSLFSSLSAMKQA
 PQATSGLMEPPGPSTPIVQRPRILLVIDDAHTDWSKYFHGKKVNGEIEIRVEQAEFSELNLAAYVTGGCM
 VDMQVVRNGTKVRSFKPDFILVRQHAYSMALGEDYRSLVIGLQYGGLPAVNSLYSVYNFCKPWFVSQL
 IKIFHSLGPEKFPLVEQTFPPNHKPMVTAPHFPVVVKLGHAHAGMGKIKVENQLDFQDITSVVAMAKTYA
 TTEAFIDSKYDIRIQKIGSNYKAYMRTSISGNWKANTGSAMLEQVAMTERYRLWVDSCEMFGLDICA
 VAVHVKDGRDYIEVMDSSMPLIGEHVEEDRQLMADLVVSKMSQLPMPGGTAPSLRPWAPQIKSAKSPG
 QAQLGPQLGQPQPRPPQGGPRQAQSPQQRSGSPSQRLSPQGGQPLSPQSGSPQQRSPPGSPQLSRAS
 SGSSPNQASKPGATLASQPRPPVQGRSTSQQGEESSKPPAPHPHLNKSQSLTNSLSTSDTSQRGTPSEDE
 AKAETIRNLRKSFASLFSD

TRTRPLE - GFP Tag - V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_003490

ORF Size: 1737 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_003490.2](#), [NP_003481.2](#)

RefSeq Size: 2918 bp

RefSeq ORF: 1743 bp

Locus ID: 8224

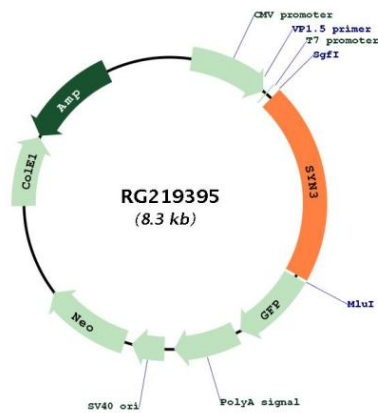
UniProt ID: [O14994](#)

Cytogenetics: 22q12.3

Protein Families: Secreted Protein

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. The protein encoded by this gene shares the synapsin family domain model, with domains A, C, and E exhibiting the highest degree of conservation. The protein contains a unique domain J, located between domains C and E. Based on this gene's localization to 22q12.3, a possible schizophrenia susceptibility locus, and the established neurobiological roles of the synapsins, this family member may represent a candidate gene for schizophrenia. The TIMP3 gene is located within an intron of this gene and is transcribed in the opposite direction. Alternative splicing of this gene results in multiple splice variants that encode different isoforms. [provided by RefSeq, Oct 2008]

Product images:



Circular map for RG219395