

Product datasheet for **RG218378**

Synapsin II (SYN2) (NM_003178) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	TurboGFP
Symbol:	Synapsin II
Synonyms:	SYNII
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide Sequence: >RG218378 representing NM_003178
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGC

ATGATGAACCTCTCTGCGCGCCGGCTGTGCGACAGCAGCTTATCGCCAACCTGCCAACGGCTACATGA
CCGACCTGCAGCGGCCCGAGCCCCAGCAGCGCGCCGCCGCCGCCCGGTCGCGGCGCCGCTCGGC
CTCGGCGCGCCCGGACCGCTCGCCGGGCGCCGAGCGGAGGCGCGCCCGCCGCTCGGCGCGCCGCGCG
CAGCCCGCGCGCAGCGCGTCGGTGGGACAGCAGCTTCTTCAGCTCGCTGTCCAAAGCCGTGAAGCAGACGG
CCGCTCGGCTGGCTGGTGGACGCGCCGCTCCCGCGCCGCGACGCCGAAGGCGCAAGGTGCTGCT
GGTGTGCAGCAGCGCCGACCGCATGGGCGCAAGTGCCTTCGGGCGCAAAAAAGTCTTGAGATTATGAT
ATCAAGGTGGAACAGCGAGAATTTTCAGAGCTCAACCTGGTGGCCATGCAGATGGCACCTATGCTGTGG
ATATGCAGGTTCTCGGAATGGCACAAGGTTGTCCGGTCTTCGGCCAGACTTCGTGCTCATCCGGCA
GCATGCATTTGGCATGGCGGAGAATGAGACTTCCGCCACCTGATCATTTGGTATGCAGATGCAGGCCTC
CCCAGCATCAACTACTGGAATCCATATACAACTTCTGTGACAAGCCATGGGTGTTTGCCAGCTGGTCTG
CTATCTATAAGACACTGGGAGGAGAAAAAGTTCCTCTCATTGAACAGACATACTACCCCAACCACAAAGA
GATGCTGACACTGCCCACTGTTCTCGTGGTGGTGAAGATTGGCCACGCTCACTCAGGCATGGGCAAGGTG
AAAGTGGAATAACCACTACGACTTCCAGAGATATGCCAGCGTGGTGCTCTACCCAGACCTATGCCACTG
CAGAGCCTTTTCATTGACTCCAAGTATGACATCCGGGTCCAGAAGATTGGCAACAACCTACAAGGCTTACAT
GAGGACATCGATCTCAGGGAACGGAAGACGAACACTGGCTCTGCGATGCTGGAGCAGATTGCCATGTCA
GACAGGTACAACCTGTGGGTGGACACCTGCTCTGAGATGTTTGGCGGCCTGGACATCTGTGCTGTCAAAG
CTGTACATGGCAAAGATGGGAAAGACTACATTTTTGAGGTGATGGAAGTGTAGCATGCCACTGATTGGGGA
ACATCAGGTGGAGGACAGGCAACTCATCCCGAACTAGTCATCAGCAAGATGAACCAAGTGTGTCCAGG
ACTCTCGCCTGTCTCTCAGAGAGCCCTAACAAACCCAGCAGCCACAGAGCGGAACACTTAAGGATCCGG
ACTCAAGCAAGACCCCACTCAGCGGCCACCCCTCAAGGTGTTTACAGTATATTCTCGACTGTAATGG
CATTGCGAGTAGGGCCAAAAACAAGTCCAAGCTTCT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG218378 representing NM_003178
Red=Cloning site Green=Tags(s)

MMNFLRRRLSDSSFIANLPNGYMTDLQRPEPQQPPPPPPPGGAASASAAPPTASPGPERRPPASAPAP
QPAPTPSVGSSFFSSLQAVKQTAASAGLVDAPAPAPAAAKAVLLVDEPHADWAKCFRGKVLGDYD
IKVEQAEFSELNLVAHADGTAYADMQVLRNGTKVVRSPDFVL RQHAFGMAENEDFRHL IGMQYAGL
PSINSLESIYNFCDPKWVFAQLVAIYKTLGGEKFLIEQTYYPNHKEMLTPTFPVVVKIGHAHSGMKV
KVENHYDQDIASVVALTQTYATAEPFIDSKYDIRVQIGNNYKAYMRITSIGNWKTNTGSAMLEQIAMS
DRYKLWVDTCSFMGGGLDICAVKAVHGDKGDYRPFVMDCSMLPEGHVQEDRQITELVISKMNQLLSR
TPALSPORPLTQOPOSGTLKDPDSSKTPPORPPPOGCLQYILDCNGIAGVKQVQAS

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_003178

ORF Size: 1434 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_003178.5](#)

RefSeq Size: 3899 bp

RefSeq ORF: 1437 bp

Locus ID: 6854

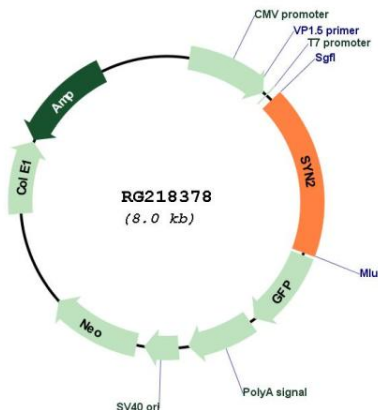
UniProt ID: [Q92777](#)

Cytogenetics: 3p25.2

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 encodes a neuron-specific phosphoprotein that selectively binds to small synaptic vesicles in the presynaptic nerve terminal. Polymorphisms in this gene are associated with abnormal presynaptic function and related neuronal disorders, including autism, epilepsy, bipolar disorder and schizophrenia. Alternative splicing of this gene results in multiple transcript variants. The tissue inhibitor of metalloproteinase 4 gene is located within an intron of this gene and is transcribed in the opposite direction. [provided by RefSeq, Feb 2014]

Product images:



Circular map for RG218378