

## Product datasheet for **SC128091**

### Synapsin II (SYN2) (NM\_133625) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Synapsin II (SYN2) (NM_133625) Human Untagged Clone
Tag:	Tag Free
Symbol:	Synapsin II
Synonyms:	SYNII
Mammalian Cell Selection:	None
Vector:	<u><a href="#">pCMV6-XL5</a></u>
E. coli Selection:	Ampicillin (100 ug/mL)



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**Fully Sequenced ORF:** >NCBI ORF sequence for NM\_133625, the custom clone sequence may differ by one or more nucleotides

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ATGATGAACTTCCTGCGGGCGGGCTGTCGGACAGCAGCTTCATCGCAATCTGCCAACGGCTACATGA
CCGACCTGCAGCGGGCCGAGCCCAGCAACCAGCGCGCCGCCCGCCCGCCCGGGCCGGCCGCCCTCGGC
CTCGGGCGGCCCCACCGCCCTCGCGGGACCGGAGCGGAGGCCGCGCCCGCCCTCGGCGCCCGCGCC
CAGCCCGCGCAACACCGTCGGTGGGACAGCAGCTTCTTACGCTCGCTGTCCCAAGCGGTAAGCAGACGG
CCGCCTCGGCTGGCTGGTGGACGCGCCCGCTCCCGCGCGCGAGCCGCCAGGAAGGCCAAGGTGCTGCT
GGTGGTCGACGAGCCGCACGCCGACTGGGCAAGTGCTTTGCGGGCAAAAAAGTCCCTGGAGATTATGAT
ATCAAGGTGGAACAGGCAGCAATTTTCAGAGCTCAACCTGGTGGCCATGCAGATGGCACCTATGCTGTGG
ATATGCAGGTTCTCCGAATGGCACAAAGGTTGTCGGTCTTCCGGCCAGACTTCGTGCTCATCCGGCA
GCATGCATTTGGCATGGCGGAGAATGAGGACTTCCGCCACCTGATCATTGGTATGCAGTATGCAGGCCTC
CCCAGCATCAACTCACTGGAATCCATATAACAATTCTGTGACAAGCCATGGTGTTTGGCCAGCTGGTGC
CTATCTATAAGACTGGGAGGAGAAAAGTTCCCTCTCATTGAACAGACATACTACCCCAACCACAAGA
GATGCTGACACTGCCAGGTTCCCTGTGGTGGTGAAGATTGGCCAGCTCACTCAGGCATGGGCAAGGTC
AAAGTGGAAAACCACTACGACTTCCAGGACATTGCCAGCGTGGTGGCTCTCACCCAGACCTATGCCACTG
CAGAGCCTTTTACTGACTCCAAGTATGACATCCGGTCCAGAAGATTGGCAACAACCTACAAGGCTTACAT
GAGGACATCGATCTCAGGAACTGGAAGACGAACACTGGCTCTGCGATGCTGGAGCAGATTGCCATGTCA
GACAGGTACAACGTGGGTTGGACACTGCTCTGAGATGTTTGGCGGCTGGACATCTGTGCTGTCAAAG
CTGTACATGGCAAAGATGGGAAAGACTACATTTTGGAGTCATGGACTGTAGCATGCCACTGATTGGGGA
ACATCAGGTGGAGGACAGGCAACTCATCACCGAAGTATCAGCAAGATGAACCAGCTTAAAGTCCCGG
ACTCCTGCCCTGTCTCCTCAGAGACCCCTAACACCCAGCAGCCACAGAGCGGAACTTAAAGTCCCGG
ACTCAAGCAAGACCCACCTCAGCGGCCACCCCTCAAGGGGGCCCTGGGCAACCCCAAGGAATGCAGCC
CCCAGGAAGGTGCTGCCTCCACGCGGGTCCCCCCTGGACCATCACTGCCACCTTCTCTCTTCTCTCC
TCTTCTCTCTCTCGGCTCCTCAGCGGCGGGCGGCCACCCACCCAGGAGATGCACCCTCCAGCA
GCAGCTCCCTGGCAGAGGCCAGCCACCCCTGGCTGCTCCACCACAGAAGCCCCAGCCTCACCACAGCT
CAACAAGTCGCAGTCCCTGACAAATGCCTTCCAGCTTCTGTGAGTCTCTTCTTCCGGTCTTCCAGCAAT
GAGGATGAAGCCAAAGCAGAGACCATCCGGAGCTTGAGGAAGTCCTTGCCAGCCTTTTCAGATTAG
    
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**5' Read Nucleotide Sequence:**

>OriGene 5' read for NM\_133625 unedited

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NGGGGGCTTANGATATTTGTNAATACCACTTTACTATAGGGCGGCGCGCACTTCGCACG
AGGCCTCGCGCCGCGGCTTGCCTGGCCAGTCCGCGCTGCTGTCTGCGGGTCTGGC
GCCGGGTCTGAGTCTCTGCTGGCTAAGCCGCCGCTCAGCCGCTCAGTCGCTCAATC
TCGCTTCCGCTCCTCCTCCTCCTCCGCGCCACCAGACCCGATCCCCGCGGCCCCCA
GCCCTTAAAGCCAGATGATGAACTTCTGCGGCGCGGCTGTCGGACAGCAGCTTCATCG
CCAACCTGCCAACGGCTACATGACCGACTGACGCGGCCGAGCCCCAGCAGCCGCCG
CGCCCGGCCGCCCGGTCCGGGCGCCGCTCAGGCTCGGCGGCGCCCGACCGCTCGC
CGGGCCCGGAGCGGAGGCCGCGCCCGCTCAGCGCCGCGCGCAGCCCGCGCCAGCGC
CGTCCGGTGGGACGAGCTTCTTCCAGCTCCTGTTCCAAGCGTGAAGCAGACGGCCGCT
CGGCTGGCTGGTGGACGCGCCGCTCCCGCGCCGCGCAGCCGCGGGAAGGCAAGGTGC
TGCTGGTGGTGCAGAGCCGACGCGGACTGGGCAAGTGTCTTCCGGGCAAAAAAGTCC
TTGGAGATTATGATATCAAGGTGGAACAGGCAGCAATTTTCAGAGCTCAACCTGGTGGCC
ATGCAGATGGCACCTATGCTGTGGATATGCAGGTTCTCCGAATGGCACAAGGTTGTCC
GGTCTTCCGGCCAGACTTCGTGCTCATCCGCGAGCATGATTTGGCATGGCGGAGAATG
GAGACTTCCGCCACCTGATCATTGGTATGCAGTATGCCAGGCCTCCCCAG
    
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<b>3' Read Nucleotide Sequence:</b>	>OriGene 3' genomic read for NM_133625 unedited AAAACGACCCCTTTGGTGATGGTCAACCTACCATGNCCAGNANAGCACTGGCGNAGGGTC ACAGGGATGCCACCCGGGATCTGTTTCAGGAAACAGCTATGACCGCGGCCCAATCTAGAG TCGAGTTTTTTTTTTTTTTTTTTTTGGTGAATGCTGCTGCTTTTATTACACCAAAGGTCTTA ACGTTTATTAGGAGATGAACACAAAGCTTGGCATACTGCTGTGCATAGTGGCATGCATTCT CCTCTATAGTGCAGCTCTGGAGTTCAAGGTTACTGCAGATTGCACATAAGAACCCTCTT CAGAGGGGAGAAAAGGGGAAACTGCAGATCCTTGTCTCCCGAATATCAGCAGACTCAAG GTGCTTACCACCACAGCAGCCTAAGATCTTGTAAAGTTGGGTGGTGTGCTTTAAACAGT AACACAGGTATGACAAGGGATCCAGGTCGGGAAAGTTCTAAAACCTTAGGGCCAAGAGT ACTTTTGGGGAAGTATATACTTCCCAAACAGGTATCACTGAATGGGGCGGGGCATGCTT AGCACTGCAACTGAGCTAGGTTAAGCTGCCAGGAGTCCACGATTAATCCTGGTTTCACAG GGAAGAATAAGACATGATGGCACTGTCACAATAAGGCCACTAACTCACAGCGAACGATG ACTTCAGAAGGAAGCTCTCATGACTACAGGAAGCAGCTCTTTCCTCTGATGCCAGGT ACCCCTTGCTGGGTAGGCACCTGCCCTGAGACTGTCAAATGGTCCTTTCTGGGCTGCACA CATCCCTTATTACAACAGAGCAGAGGAAGGACCACCACGTCGAAGTCATGGGACATCCAC CAACTGGCTGATGTTGTTGGTAA
<b>Restriction Sites:</b>	Please inquire
<b>ACCN:</b>	NM_133625
<b>Insert Size:</b>	2800 bp
<b>OTI Disclaimer:</b>	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).
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>
<b>RefSeq:</b>	<u><a href="#">NM_133625.2</a></u> , <u><a href="#">NP_598328.1</a></u>
<b>RefSeq Size:</b>	2694 bp
<b>RefSeq ORF:</b>	1749 bp
<b>Locus ID:</b>	6854
<b>UniProt ID:</b>	<u><a href="#">Q92777</a></u>
<b>Cytogenetics:</b>	3p25.2
<b>Domains:</b>	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]

Transcript Variant: This variant (IIa) represents the shorter transcript but encodes the longer isoform (IIa), which has an alternate C-terminus with distinct H and E domains, compared to isoform IIb. Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.