

Product datasheet for SC323256

Synaptopodin 2 (SYNPO2) (NM_001128934) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Synaptopodin 2 (SYNPO2) (NM_001128934) Human Untagged Clone
Tag:	Tag Free
Symbol:	SYNPO2
Vector:	<u>pCMV6 series</u>
Fully Sequenced ORF:	>NCBI ORF sequence for NM_001128934, the custom clone sequence may differ by one or more nucleotides

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ATGGGCACAGGGGATTTTATCTGCATTTCCATGACTGGAGGGGCCCTGGGGTTCAGA
TTGCAAGGTGGCAAGGAGCAGAAGCAGCCCTTACAAGTTGCAAAGATTGAAATCAGAGC
AAAGCCTCTGGGTCTGGGCTCTGTGAGGGAGATGAAGTGGTTTCCATCAATGGCAACCCT
TGTGCAGATCTCACCTACCCTGAAGTCATCAAGCTCATGGAAAGCATAACAGACTCTCTC
CAAATGCTCATCAAAGACCATCCAGTGAATAAGTGAGGCTTTGATATCTGAAAATGAA
AACAAAAACCTCGAGCATCTCACACATGGGGTTATGTGGAAAGTACCACCCTGCAGATT
CGACCGGCCACAAAGACCAGTGCACAGAATTCTCCTCGCCCCTGTCAAGACTGAAGTT
CCCTAGCTGAGAACCAAGAAGTGGTCCCGACTGTGCAGGCAGCTTGAAAGAAGAAACA
GGCCCGAGCTACCAAAGGCTCCCAAATGCCTGACTCCCAAAGAGGACGCTGGCAGAA
GAGCTGATCTTAAGGGAGAAGGTAGAAGCGGTACAGCCTGGGCCTGTGGTTGAGCTGCAA
CTGTCCCTTTACAGGAGAGACATAAGGGCGCTAGTGGCCCTTTAGTGGCTCTCCCGGA
GCTGAAAATCTAAGTCTCCTGACCCAGACCCTAATTGTACATGACAGGATTGTCCAC
ATAAATTCGATCCCTACTAATGAGAAAGCAGACCCTTCTCTGAGGTCCAGCAAGATAATC
CAGATCTCCAGTGGCAGAGAGTTGAGAGTATCCAGGAAAGTGAAGCAGGAGATGCGGGA
CTGCCCCGGTGAAGTATCCTCGACTGCTCTGACAGGCAGAAGACAGAAGGGTGCAGG
CTTCAGGCAGGAAAGGAGTGTGTGGATTCTCAGTGGAAGGAGGGCAGTCAGAAGCACCT
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CTTCTTCTAACGGATGCTCCCAACCCCAACTCCAAGGGGTGTTGATGTTAAGAAGCGA
CGTGGAGGGCCAGGAAATACACCCTAGTTAGCTACGGTACTGGCGAGCTTGAGCGAGAG
GCGGACGAGGAGGAAGAAGGTGACAAGGAGGATACATGTGAAGTAGCATTCTTGGTGCA
AGCGAATCAGAGGTGGATGAAGAGTTATTGTCTGACGTTGACGACAACACACAAGTTGTG
AACTTTGACTGGGATTCTGGACTGGTGGACATTGAAAAGAACTGAACAGAGGGGACAAG
ATGGAGATGTTACCAGACACCACAGGCAAGGGAGCCCTCATGTTTGCCAAGAGGAGGGAG
AGAATGGATCAGATCACAGCCAAAAAGAAGAGGACAAGGTAGGTGGAACGCCAAGCAGA
GAACAAGATGCTGCCAGACCGATGGCCTGAGAACCACGACTTCTTACCAAAGAAAGGAG
GAAGAGTCGGTAAGAACGCAGAGCTCTGTGAGCAAAAGCTACATCGAGGTGAGTCATGGT
CTTGGCCATGTTCCCAACAGAATGGCTTCAGTGGGACATCTGAGACAGCAAACATCCAG
AGGATGGTCCCCATGAATAGAACGGCCAAACCCTCCAGGGTCTGTGAATCAGCCAGCT
ACCCCTTCTCGCAACCCGAAACATGACGAGTCCCATGCTGACTTCTCGACCTCCA

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CCTTACTCTGCAGTCACTCCTCCCCCTGACGCCTTCTCCAGAGGGGTTTCAAGTCCGATT
GCTGGCCCAGCACAGCCCCCTCCATGGCCCCAGCCTGCCCGTGGTCCCAGCCAGCCTTT
TACGATTTCGTCTGAGCGAATAGCTTCCCAGATGAGAGGATCTCAGTGCCAGCAAAAAGA
ACAGGAATATTGCAGGAGGCCAAAAGGAGAAGCAGCAGCAAAAACCCATGTTACTTTTAA
GAGCCCAAAGTAAGCCCAAATCCTGAACTTGTCACTCCTTCAAATTCAGAAGGCAAA
CGGGCCACTGGAGCTGGAGGTGATTCGGACCGGAAGAAGACTACCTCAGCTTGGGGCA
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CCAAAACCTGCAGTCAAGTCTCATCCTCCCAACCAAGTAACTCCAGTTTCCCCAGTCTGG
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ACCGTTGTCTCCTCCATCAAATAGCCCAGCCTTCTTACCCTCCTGCCCGGCTGCAAGT
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ACACCCAAACCAACAGTTTCCACACCAACAGTCAATGCTGTTGAGCCTGGTGCAGTGGGA
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TCGAGAATGGAGAAGTATGTGGTCGATTGAGACACGGTGCAGGCCACGCTGCTCGAGCT
CAGTCTCCCACTCCATCTCTCCCGCCAGTTGGAAGTACTCCTCCAATGCCGAGCACCT
CCTCCTGTGGCCTATAATCCTATCCACTCGCCGCTTACCCTGCTGCTCTCAAGTCT
CAGCCATCAGCTGCACAGCCCTCCAAAATGGGCAAGAAAAGGGAAAGAAACCCCTCAAT
GCATTAGATGTCATGAAGCACCAACCGTATCAGCTCAATGCATCCTTGTACTTTTCAA
CCTCCAGATGCAAAGGATGGCCTCCCCCAGAAGTCATCAGTCAAGGTCAATTCAGCCCTG
GCCATGAAGCAAGCTCTTCTCCCGGCCAGTGAATGCTGCCTCACCTACGAATGTGCAG
GCTTCGTGAGTACTCGGTACCAGCCTATACCTCTCCTCCTTCTTTCAGAGGCC
TCCTCACCAGTCAGTGCATCCCCAGTGCCTGTGGGCATTCCCACCTCGCCAAAGCAAGAA
TCAGCCTCATCTTATTTTGTGGCACCAAGGCCAAAGTTCTCAGCCAAGAAAAGTGGT
GTCACAATTCAGGTGAAATGTAATCTGGGATCCATAGTCAAGATATCATAAAGGACCTAC
TCCCAGCCTACCTTTCTCCTCTACC

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- Restriction Sites:** Please inquire
- ACCN:** NM_001128934
- 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:** This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.
- 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_001128934.1](#), [NP_001122406.1](#)
- RefSeq Size:** 4866 bp

RefSeq ORF: 3330 bp

Locus ID: 171024

UniProt ID: [Q9UMS6](#)

Cytogenetics: 4q26

Gene Summary: Has an actin-binding and actin-bundling activity. Can induce the formation of F-actin networks in an isoform-specific manner (PubMed:24005909, PubMed:23225103). At the sarcomeric Z lines is proposed to act as adapter protein that links nascent myofibers to the sarcolemma via ZYX and may play a role in early assembly and stabilization of the Z lines. Involved in autophagosome formation. May play a role in chaperone-assisted selective autophagy (CASA) involved in Z lines maintenance in striated muscle under mechanical tension; may link the client-processing CASA chaperone machinery to a membrane-tethering and fusion complex providing autophagosome membranes (By similarity). Involved in regulation of cell migration (PubMed:22915763, PubMed:25883213). May be a tumor suppressor (PubMed:16885336). [UniProtKB/Swiss-Prot Function]

Transcript Variant: This variant (3) contains an alternate 3'-terminal exon, compared to variant 1. This results in a novel 3' coding region and 3' UTR, compared to variant 1. The encoded isoform (c) has a shorter and distinct C-terminus, compared to isoform a.