

Product datasheet for RN217568

Synpo2 (NM_001191963) Rat Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Synpo2 (NM_001191963) Rat Untagged Clone
Tag:	Tag Free
Symbol:	Synpo2
Synonyms:	RGD1564779
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
Fully Sequenced ORF:	>RN217568 representing NM_001191963 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**GCGATCGC**C

ATGGGCACCGGAGATTTTCATCTGCATTTCCATGACTGGAGGGCGCCCTGGGGTTTCAGGCTGCAAGGAG
GCAAGGAGGAGAAGCAGCCCTTGCAAGTGGCAAAGATTCGAAGTCAGAGCAAGGCATCGGACTCCGGCT
GTGTGTTGGGGATGAAGTGGTGTCCATCAATGGTAACCCTTGTGCAGACCTTACTTACCCTGAAGTCATC
AAACTCATGGAAGCATAACGGACTCCCTCCATCTGCTTATTAAGAACCCACCAGTGGAAACAAGTGAGG
CTTTGGATTCTGAAACAGAAAATACAAACCACCAGCACCTTCCACACGGGGGGCCCATGGAAAGTACCAC
CCTGCAGATCCAGCAGCTGCCAAGACCAGGGCAAAGACTTCCTTCTTCTGCTTCCAGTCCAGACTAGTGCT
CCCCGAAGTGAAGGACCAAGGAAATGCCTGGGGTTATGCAGAGTGTACAACAGAAGACCAAGTTTCCCAGA
TGCTGGCTCCCAAGAAGGACACTTGGTAGAAGAGGTCATCTTAAGGAAAAAGCCAGAAGCAGGCCAGCC
AGGCCATGTGGTTGAGTTACAGCTGTCCCTCTCAAAGGAAAGACAGCGATGCACCAGTGACCCTATAGTG
ACTCTCCTGGGAAATGAAAAATCAAGTCTCCAGACCCAGACTGGGGCACCAACACGGGAGGACTGTCC
ACATAAATCAATCCCTGCTCCTGAGAAAGCAGACACTTCTGACGTCGGCACCAAGTCCAGACCTC
CAGTGGCCGGGAGCTGACAGTGATCCAGGGAAGAGACCCAGGAGGCACAGGGCTGCCCCAGGTGGAAGTG
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CGAGCAGGAGGAGATCAACGCTCGGGAAGGACCAGGGCAGACCACACAAGCACAGAGCGAGGCATGCC
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CCCTCCTCCTAACGGATGCTCCCAACCCGAAGTCCAAGGGGTGTTGATGTTAAGAAGCGGAGGCGGAG
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TGAAAAGAGGCTGAACCGAGGGCACAAGATGGAGATGTTGCCCGACACCAGGCAAGGGAGCGCTCATG
TTTGCCAAAGAGGAGAGAGGATGGAACAGTTCACAGCCAAAATGAAGAGGAAAAGACCGGTGGGCTAG



CAGGCGGAGGATCAGATGCCCTACAGACGGACGGTCTGAGAACCATGACTTCTTATCAAAGAAAAGAAGA
 ATCGGTGAGAATGCAGAGCTCTGTGAGTGAGAGCTCCTTCCAGATGGGACGCAGTCTTGGCAGTGTGCCA
 CAACAGAATGGCTTCAGTGGAGTGTCTGAGACAGCAGGGCCCCAGAGGATGATCCCCATGAACAGAACCG
 CCAAGCCCTTCTGGGATCTGTGAACAGACAGCGGCCCATCTCCCAACACAGAGTGTGACAAGTCC
 CATCCCTGACTCCCTGCGCCACCACATACTGTCAGTCTCACCTCCACCAGAAGCCTTCTCCAGGGGG
 ATATCAAGCCCAGTTGCTGGCCCGCACAGCCCCCTCCGTGGCCCCAGCCTGCTCCATGGTCGCAACCAG
 CCTTCTATGATTCTTCTGAGCAAATAGCTTCCCAGGATGAGAGGATCGCAGTGGCCGCAAAAGAACAGG
 AATACTGCAGGAAGCCAAAAGACGAGGACAACAACAAACCATGTTTACTTTCAAAGAAAACAAAGTGAGC
 CCCAACCCCGAACTCCTGTCCCTTCTTCAAATGCAGAAGGCAAGCGAGGCACTGGAGCTGGAGGGGACT
 CCGGGCCAGAAGAAGACTACCTCAGTTTAGGCGCAGAGGCTTGTAAATTCATGCAGAGTCTGCCAAACA
 AAAGACCCCTCCTCCCGTCCGCTCAAAGCCTGCAGTCAAGACCTCCTTCTCCTCCAACCCAGTAGCCCT
 GTTCTCCAGTCTGGTCTCCAGGAGTGGCTCCAGCCCAGGGTCTGCCTTCTCTACAACAAACCCACCAA
 ACCCACCACAGGTCAGTCTGTGCTCCTCCATCAAATAGCCAGCCTACCTGCCCTCCAGCCCGGCCCGC
 GAGTGCAGTGAACCTGGCTGGCTCTTCAAAGGTCCTCAAGCAGCAGTAGTCAGTCATAACTATACACC
 AAGCCATCAGCACCCACACCATAGTAAATGCTGCTCCTGCTGGTGGCGGGGACCATCCAATGAGCTTC
 CTGGAATGAGTGGGAAAGGAGCCCAACTCTTCGCTAAAAGGCAGTCTAGGATGGAGAAGTATGTGGTAGA
 TTCTGACACGGTGCAGGCCACACAGTTCGGGGCCAGTCTCCTACTCCATCCCTGCCCGCAGTTGGAAG
 TACTCCTCCAATGTCCGAGCACCGCCTCCGGTGGCCTACAATCCTATCCATTCCTCCGCTTACCCACTGG
 CTGCTATCAAGTCTCAGCCACCGGGAGCCAGGCTCCAAAACGAGCAAGAAAAGGGCAAGAAACCTCT
 TAACACTTTGGATGTCATGAAGCACCACCATATCAGTCAACGCGTCTTTGTTACTTTTCAACCCCC
 GATTCAAAGGATGGCCTCCCTCAAAGTCAACAGTCAAGGTGAGTTCAGTAGCCCTGCCATGAAGCAAG
 CCCTTCTCCCGGCAGGCGGATATTGGCTCTCCACAAAACGCGAAGGCTTTCATCTGTATTAGTCCC
 GGCTATACCTCTCAGCCCAACTCTTTGGCGAGGCCACCTCACCAGTCAGCGCATCCCGGTGCCTGTG
 AGTGTTCACCTCTCCAAAGCAAGAAACGACCTCCACATCCTATTTTGGTCCGAGGCCGAAGTTCT
 CAGCCAAGAAAAGTGGTGTACAGTTCAGGAGAACTGGCGCTCCCTTCTCTCCCGGAAGAGCAGCTCC
 GCCCATCATGTCTGCACCTCCCTGGCTGTGCCAGCCTGCCTACAGTACTCCAGCAAACCAACCTCGAG
 CAAGAGAAAGCTAACAGAGACCTACACCTTGGGAGGCGGCCAAGTCCCCTCTCGGTCTAGTGGATG
 AGGCCTTCAGACCCAGGAACATCGAGGAATCCATTGTGGCGAATGTAGTCTCTGCAGCTCGGAGGAAGGT
 GTTTCAGGGTCCAAGAGGACTGGAAGAGAGACTGTCCTTTGTCCCTCAAACCTCAGAAGACCAGCATG
 AGCTTTTCTGAAAGGCGAGAGTATAATGTTCCATCCCCAGTCAACAGCCACGTGTCTAGCCACTCCTAT
 ATAGTCCCAGTTGCCATATGTATGCTACAGGAAGGAGTCCAGAAATGATTTGAAAGCAATGTCCATGGA
 CAGGAGTCTGAATACTGTCTTCCACTAGGTGGTTATGACTATAACCCACACCAAGGGGGTGGAGACAC
 CAACCATGA

AGCGGACCGACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC
 TGGATTACAAGGATGACGACGATAAGGTTTAA

- Restriction Sites:** SgfI-RsrII
- ACCN:** NM_001191963
- Insert Size:** 3789 bp
- 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:** Clone contains native stop codon, and expresses the complete ORF without any c-terminal tag.
- 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_001191963.1](#), [NP_001178892.1](#)

RefSeq Size: 4092 bp

RefSeq ORF: 3789 bp

Locus ID: 499702

UniProt ID: [D4A702](#)

Cytogenetics: 2q42

Gene Summary: Has an actin-binding and actin-bundling activity. Can induce the formation of F-actin networks. 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 (By similarity). 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 (PubMed:23434281). Involved in regulation of cell migration. May be a tumor suppressor (By similarity).[UniProtKB/Swiss-Prot Function]