

Product datasheet for **RC228616**

Synaptopodin (SYNPO) (NM_001166208) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Synaptopodin (SYNPO) (NM_001166208) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Synaptopodin
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC228616 representing NM_001166208
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGCTGGTCTCACCTCCACCTCCGCCCTTGACCCAGCGAAGGGAGGCCTACCCCTGCGCCTTCC
 AGATCCCTGATGGAAGCTACAGGTGTCTGGCTCTGGAAGCCGAGGAGAGCAGCGGTGAGGAGGCCCTGCA
 GGGAGAGGTGGGGCTACCGACCTGGAAGAGGATGAGGGGTGAGGAGGAGTGGGACGACTCTGCCTGC
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 AACAGGGGGCTCCAGCAGCAGCAGAGGGCCAGCCAGGACTGGGATGTAGTGAAGGCCGGGAGATGAT
 GACAGCCAGCCAGCCCTGGCCCTGGGCCAGAGTGGCCAGAAACCAGCGTTGGGCCGGAGCACTAGC
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 CCAGCTCCAATCCCGTGGCGTCCAGCTCTTCAACAGGCGCCGGCAGAGGGTGAACGAGTTCACCTTGA
 GAGCCACGGCCAGAGGGGACAGAAGCCAGCCAGGAGTCCCTCAGAGTGTCCCTTCAAGCTCCAGGC
 CATGCACCGGGGCTCAGCCTGAGTTCACCTCGCTGCCGGAGCCAGGCCCTCCACGGCACCCAGTCCCC
 AGAGCCCCGACAGAGGGGTCCCTGGCCACAGCATGGAGGGTACTCAGAGGAGGTAGCTTGTGCGGCA
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 CTGACAGCCAATGGGCTGCACCTGTCCAAAACCAGAGGGCCAGCAGTCCCTACCGGCCACCTCCAG
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 CAGAGCTGCCACTTTCTAGCATCCAACAGAATTCCTCAGAGGCCAACTCCCATCTAATGGCACAGGGC
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 CACACTCCTAATTGACAAGGTATCAACTCCAGCTACCACCAGCACCTTCTCCAGAGAAGCTACGCTC
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 GCGCCAGGGGGCACAGCCAGATGGAGAGGAGCCCATGCTAGAGAGACGACATTTTGGGAGAAGGCC
 CGGCTCCCGAGCCCCCAGTTTGCAGACAGGAGCCCCGGCCACAGAGACATAATGTCCCGAGCCC
 CATGGTGGAAAGGAGGATGATGGGGCAGCGAAGCCGGCCTCAGAGAGACGCCCCTTGGGAACTTCACT
 GCACCCCCACCTACACTGAGACCTTGTCCACAGCCCCTCTGGCTTCTGGGTGAGTCTCTCCCTCAT
 ATTCTGTCTGTATCCAGCTCCGACCCCAAGTCTTCTCATCTGAAGGGCCAGGCGGTTCCTGCCAGCAA
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 AAGTCACCCCGCATCCAGGCCAAGCCGAAGCCAAACCAACCAAGCAACCTCTCCGAGGCTCTGGGAAGG
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 GACCTGGTGCCAACCTGCCAAGGGGGCTCTCCCTCCATCTCCTGCCCTGCCTCGGCCCTCGGCTCCT
 CACCGGGCTCTACACTCCCCGGCCAGGACAGCCTGCAGCCACTGCCGTGAGCCCTCTTACGGCGG
 TGACATCTCCCCGTGTCTCCCTCAGGGCGTGGTCTCCCGAGCCAAGCAGGCCCCAGGCCCTCTTC
 TCTACCCGAACCGGGATCGAGGCTCAGGTGTGGAAGCCTTCTTCTGCTTCAAG

ACGCGTACGCGGCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC228616 representing NM_001166208
 Red=Cloning site Green=Tags(s)

MLGPHLPPPPLAPSEGRPTPCAFQIPDGSYRCLALEAEESSGEEGLQGEVGPDTLDEEDEVSRSGDDSDAC
 RVTQGTQPLPKALGIQPPSCSREEQASQHDDRASQDWDVVKAGQMMTASPSPGPGPRVAQKPALGRSTS
 LTEKDLKEAKARSQQIAAQLTTPPSSNSRGVQLFNRRRQRVNEFTLESHGQRGQKPSQESLRVLPSSLPG
 HAPGLSLSTSLPEPGPPRHPSPQSPDRGVPGHSMEGYSEEASLLRHLEKVAEEEEVPLVVYLKENAAL
 LTANGLHLSQNREAQQSSPAPPPAEVHSPAADVQNQLASPSATLTTPTSNSSHNPPATDVNQNPATVVP
 QSLPLSSIQQNSSEAQLPSNGTGPASKPSTLCADGQPQAPAAEVRCSTLLIDKVSTPATTTSTFSREATL
 IPSSRPPASDFMSSLLIDIQPNLTVVSADQEMSGRAAATTPTKVYSEVHFTLAKPPSVVNRTPRFGIQ
 APGGTSQMERSPMLERRHFGEKAPAPQPPSLPDRSPRPQRHIMSRSPMVERRMMGQRSPASERRPLGNFT
 APPTYTETLSTAPLASWVRSPSYSVLYPSSDPKSSHLKGQAVPASKTGILEESMARRGSRKSMFTFVEK
 PKVTPNPDLLDLVQTADEKRRQRDQGEVGVVEEFPALGAEASNFQQEPAPRDRASPAAAEVVPWASCL
 KSPRIQAKPKPNQNLSEASGKAELYARRQSRMEKYVIESSSHTPELARCPSTMSLPSWVYPTNAP
 GAFRVASRSPARTPPASLYHGYPENGLRPEPTKQPPYQLRPSL FVLSPIKEPAKVS PRAASPAKPSLL
 DLVPNLPGALPPSPALPRPSRSPGLYTPGQDSLQPTAVSPPYGGDISPVSPSRAWSPRAKQAPRPSF
 STRNAGIEAQVWPKSFCFK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8035_d09.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:

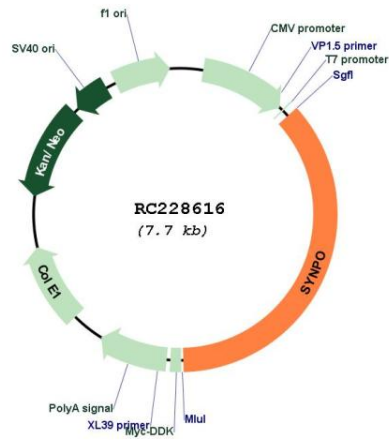


* The last codon before the Stop codon of the ORF

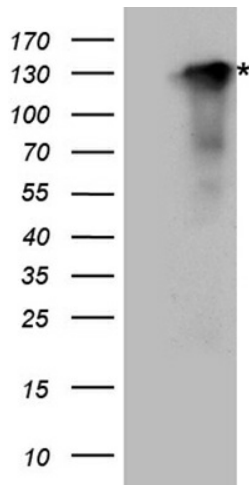
ACCN: NM_001166208

ORF Size:	2787 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:	<ol style="list-style-type: none">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_001166208.2
RefSeq ORF:	2790 bp
Locus ID:	11346
UniProt ID:	Q8N3V7
Cytogenetics:	5q33.1
MW:	99.3 kDa
Gene Summary:	Synaptopodin is an actin-associated protein that may play a role in actin-based cell shape and motility. The name synaptopodin derives from the protein's associations with postsynaptic densities and dendritic spines and with renal podocytes (Mundel et al., 1997 [PubMed 9314539]).[supplied by OMIM, Mar 2008]

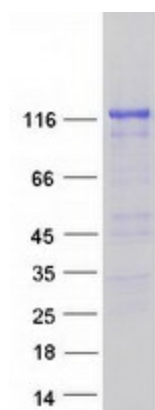
Product images:



Circular map for RC228616



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY SYNPO (Cat# RC228616, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-SYNPO antibody (Cat# [TA890150]). Positive lysates [LY426310] (100ug) and [LC426310] (20ug) can be purchased separately from OriGene.



Coomassie blue staining of purified SYNPO protein (Cat# [TP328616]). The protein was produced from HEK293T cells transfected with SYNPO cDNA clone (Cat# RC228616) using MegaTran 2.0 (Cat# [TT210002]).