

## Product datasheet for **RG228617**

### Synaptopodin (SYNPO) (NM\_001166209) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Synaptopodin (SYNPO) (NM_001166209) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	SYNPO
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>RG228617 representing NM\_001166209  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**GCGATCGCC**

ATGCTGGGTCCTCACCTCCCACCTCCGCCCTTGACCCAGCGAAGGGAGGCCTACCCCTGCGCCTTCC  
 AGATCCCTGATGGAAGCTACAGGTGTCTGGCTCTGGAAGCCGAGGAGAGCAGCGGTGAGGAGGGCCTGCA  
 GGGAGAGGTGGGGCTACCGACCTGGAAGAGGATGAGGGGTGAGGAGGAGTGGGACGACTCTGCCTGC  
 AGAGTCACCCAGGGGACACCGCAGCTGCCAAAGCCCTGGGCATCCAACCCAGCTGTCCAGAGAGG  
 AACAGGGGGCTCCAGCAGCAGCAGGGCCAGCCAGGACTGGGATGTAGTGAAGGCCGGGAGATGAT  
 GACAGCCAGCCCAGCCCTGGCCCTGGGCCAGAGTGGCCAGAAACCAGCGTTGGGCCGGAGCACTAGC  
 CTCACGGAGAAGGATCTGAAAGAAGCCAAGGCGCGGAGCCAGCAGATTGCAGCCAGCTGACCACCCCTC  
 CCAGCTCCAATCCCGTGGCGTCCAGCTCTTCAACAGGCGCCGGCAGAGGGTGAACGAGTTCACCTTGA  
 GAGCCACGGCCAGAGGGGACAGAAGCCAGCCAGGAGTCCCTCAGAGTGTCCCTTCAAGCTCCAGGC  
 CATGCACCGGGGCTCAGCCTGAGTTCACCTCGCTGCCGGAGCCAGGCCCTCCACGGCACCCAGTCCCC  
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 CAGAGCTGCCACTTTCTAGCATCCAACAGAATTCCTCAGAGGCCAACTCCCATCTAATGGCACAGGGC  
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 GCGCCAGGGGGCACCAGCCAGATGGAGAGGAGCCCATGCTAGAGAGACGACATTTTGGGAGAAGGCC  
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 CATGGTGGAAAGGAGGATGATGGGGCAGCGAAGCCGGCCTCAGAGAGACGCCCCTTGGGAACTTCACT  
 GCACCCCCACCTACACTGAGACCTTGTCCACAGCCCCTCTGGCTTCTGGGTGAGTCTCTCCCTCAT  
 ATTCTGTCTGTATCCCAGCTCCGACCCCAAGTCTTCTCATCTGAAGGGCCAGGCGGTTCCTGCCAGCAA  
 GACGGGCACTTCTGGAGGAGTTCGATGGCCCGCGGGCAGCCGCAATCCATGTTTACTTTCTGAGGAAAG  
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 CACCGGGCTCTACACTCCCCGGCCAGGACAGCCTGCAGCCACTGCCGTGAGCCCTCTTACGGCGG  
 TGACATCTCCCCGTGTCTCCCTCAGGGCGTGGTCTCCCGAGCCAAGCAGGCCCCAGGCCCTCTTC  
 TCTACCCGAACCGGGATCGAGGCTCAGGTGTGGAAGCCTTCTTCTGCTTCAAG

**ACGCGTACGCGGCCGCTCGAG** - GFP Tag - **GTTTAA**

Protein Sequence: >RG228617 representing NM\_001166209  
 Red=Cloning site Green=Tags(s)

MLGPHLPPPPLAPSEGRPTPCAFQIPDGSYRCLALEAEESSGEEGLQGEVGPDTLEEDEGVSRSGDDSDAC  
 RVTQGTPLPKALGIQPPSCSREEQASQHDDRASQDWDVVKAGQMMTASPSPGPGPRVAQKPALGRSTS  
 L TEKDLKEAKARSQQIAAQL TTPPSSNSRGVQLFNRRRQRVNEFTLESHGQRGQKPSQESLRVLPSSLPG  
 HAPGLSLSTSLPEPGPPRHPSPQSPDRGVPGHSMEGYSEEASLLRHLEKVAEEEEVPLVVYLKENAAL  
 LTANGLHL SQNREAQSSPAPPPAEVHSPAADVQNQLASPSATLTTPTSNSSSHNPATDVNQNPATVVP  
 QSLPLSSIQQNSSEAQLPSNGTGPAASKPSTLCADGQPQAPAAEVRCSTLLIDKVSTPATTTSTFSREATL  
 IPSSRPPASDFMSSLLIDIQPNLTVVSADQEMSGRAAATTPTKVYSEVHFTLAKPPSVNRTARPFGIQ  
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 PKVTPNPDLLDLVQTADEKRRQRDQGEVGVVEEFPALGAEASNFQQEPAPRDRASPAAAEVVPWASCL  
 KSPRIQAKPKPNQNLSEASGKGAEL YARRQSRMEKYVIESSSHTPELARCPSTMSLPSWVYPTNAP  
 GAFRVASRSPARTPPASLYHGYPENGLRPEPTKQPPYQLRPSL FVLSPIKEPAKVS PRAASPAKPSLL  
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 STRNAGIEAQVWKPSFCFK

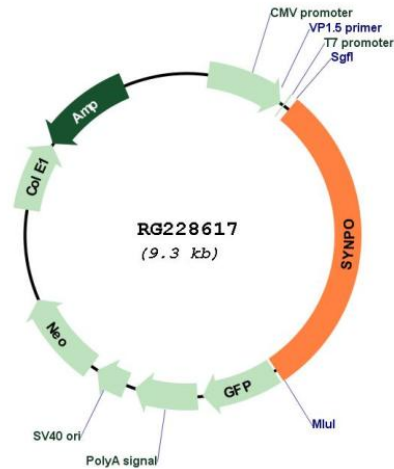
TRTRPLE - GFP Tag - V

Restriction Sites:

SgfI-MluI

Cloning Scheme:



**Plasmid Map:**


**ACCN:** NM\_001166209

**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:**

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\\_001166209.1](#), [NP\\_001159681.1](#)

**RefSeq Size:** 5114 bp

**RefSeq ORF:** 2790 bp

**Locus ID:** 11346

**UniProt ID:** [Q8N3V7](#)

**Cytogenetics:** 5q33.1

**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]