

Product datasheet for **RC222968**

Syntrophin gamma 2 (SNTG2) (NM_018968) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Syntrophin gamma 2 (SNTG2) (NM_018968) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Syntrophin gamma 2
Synonyms:	G2SYN; SYN5
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC222968 representing NM_018968
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGGCACCGAGGACCCTCCGCGGACGCCAGGGCTGCCTGCTGGTACCTGCGC
 GGACGAAAACCACTATTGCTCTGTTGTATGATGAAGAGTCCGAAAATGCCTATGACATCCGGCTGAAGCT
 GACGAAAGAGGTGCTGACAATTCAGAAACAAGATGTTGTCTGTGTGGCGGAAGCCACCAGGGCAGGAAT
 CGCAGAACTGTTACACTCCGCAGACAGCCAGTTGGCGGCTTGGCCTGAGTATAAAGGGAGGTTCTGAGC
 ACAACGTCCTGTGTCATATCAAAAATATTCGAAGACCAAGCAGCTGACCAGACAGGGATGTTGTTCTGT
 AGGAGATGCTGTTCTCCAGGTTAATGGCATAACATGTAGAAAATGCAACTCATGAAGAAGTGGTGCATCTG
 CTGAGAAATGCTGGCGATGAAGTACCATACCGTTGAGTATCTCAGGGAAGCGCCGCATTCTGAAGC
 TCCCGTTAGGGTCCCAGGGCCATCCAGCGACCACAGCAGTGGGGCTCCTCTCCCCTCTTTGACAGCGG
 TTTGCATCTGAACGGAACTCCAGTACCACAGCCCATCGTCACCTTCTCGCCCATAGCTAAGGACCCG
 AGGTATGAGAAGCGCTGGCTGGACACCTTGTCCGTGCCTCTGTCCATGGCTCGCATCTCAAGGTACAAG
 CCGGAACGGAAAATTAAGGTGGAATGCGTTCGAGGTGCTCGCCCTGGACGGAGTCAGCTCTGGGATCCT
 CCGGTTTTACACAGCCCAGGATGGCACCAGCTGGCTGCGGGCGGTCTCAGCCAACATCAGGGAGCTGACA
 CTTCAGAACATGAAGTGGCGAACAAAATGCTGCTCTCCTCCGACCAGGTTGTGCATATGGGGTGGGTAA
 ATGAGAACTCCAAGGAGCTGACTCCTCTCAAACCTTCAGACCAAGTTCCTAGCACTGAAGGGCCCGTC
 CTTCTACGTTTTACGACTCCTCCGGTGAACATTCGATTGGGTGCGAGCAGAAAGGACCTATCACCTC
 TGTGAGGTGCTATTTAAAGTTCACAAGTCTGGCTCACAGAGGACTGCTGGTTGCAAGCAAACCTGTATC
 TGGGCTTCAAGATTTGACTTTGAGACCAGAGCCCTATTGCTTCAGCATCGTGGCCGCGCCATGGGAA
 GAGCCATGTTTTCAACGTGGAGCTTGGCAGCGAGCTGGCCATGTGGGAGAAGTCCTTCAAAGAGCCACG
 TTCATGGAAGTTCAGAGAACCGGTCCAGAACATACATGTGCAGCTGGCAAGGAGAGATGCTGTGTTTCA
 CGGTGGATTTTCGCGTTGGGATTTACCTGTTTTGAGAGTAAGACCAAGAATGTGCTCTGGAGATTTAAAT
 TTCCAGCTTAAGGGATCTCAGATGATGGGAAAACCGAGTAAAGCTGCTGTTTCAGAACTCGGACACC
 AAACAGATTGAGACGAAGGAACTCGAGTCCAGGACCTGAGGGCTGTCTGCACTGCATCCACTCCTTCA
 TAGCAGCAAGGTGGCTCCGTGGACCCCGGCTTCATGGACAGTCAGAGTCTGCCAGAAAATACATGTA
 CAGCAGC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC222968 representing NM_018968
 Red=Cloning site Green=Tags(s)

MGTEGPPPPAASRGRQGLLVPARTKTTIALLYDEESENAYDIRLKLKEVLTIQKQDVVVCVGGSHQGRN
 RRTVTLLRRQPVGGLGLSIKGGSEHNVPVVISKIFEDQAADQTMFLVGDVAVLQVNGIHVENATHEEVVHL
 LRNAGDEVITITVEYLREAPAFLLKPLGSPGSSDHSSGASSPLFDSGLHLNNGSSTTAPSSPSSPIAKDP
 RYEKRWLDLTVPLSMARISRYKAGTEKLRWNAFEVLALDGVSSGILRFYTAQDGTDLRAVSANIRELT
 LQNMKMANCKCSPSDQVVMGWVNEKLQADSSQTFRPKFLALKGPSFYVFPSTPPVSTFDWVRAERTYHL
 CEVLFKVKHFWLTEDCWLQANLYLGLQDFDFEDQRPYCFIVAGHGKSHVFNVELGSELAMWEKSFQRAT
 FMEVQRTGSRTYMCSWQGEMLCFVDFALGFTCFESKTKNVLWRFKFSQLKGSDDGKTRVKLLFQNLDT
 KQIETKELEFQDLRAVLHCIHSFIAAKVASVDPGFMSQSLARKYMYSS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk8046_e01.zip

Restriction Sites:

Sgfl-MluI

Cloning Scheme:

ACCN: NM_018968

ORF Size: 1617 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_018968.4](#)
RefSeq Size: 1904 bp

RefSeq ORF: 1620 bp

Locus ID: 54221

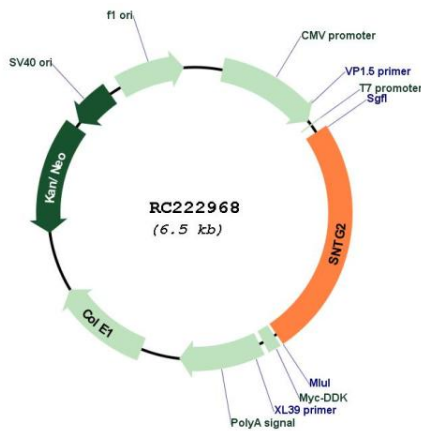
UniProt ID: [Q9NY99](#)

Cytogenetics: 2p25.3

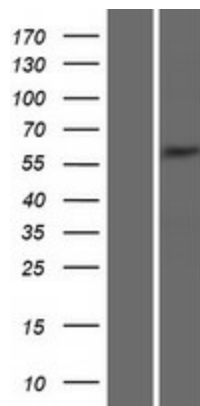
MW: 60 kDa

Gene Summary: This gene encodes a protein belonging to the syntrophin family. Syntrophins are cytoplasmic peripheral membrane proteins that bind to components of mechanosensitive sodium channels and the extreme carboxy-terminal domain of dystrophin and dystrophin-related proteins. The PDZ domain of this protein product interacts with a protein component of a mechanosensitive sodium channel that affects channel gating. Absence or reduction of this protein product has been associated with Duchenne muscular dystrophy. There is evidence of alternative splicing yet the full-length nature of these variants has not been described. [provided by RefSeq, Jul 2008]

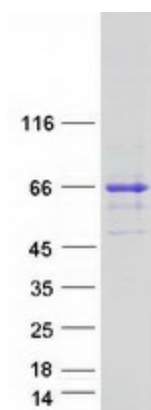
Product images:



Circular map for RC222968



Western blot validation of overexpression lysate (Cat# [LY412855]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC222968 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified SNTG2 protein (Cat# [TP322968]). The protein was produced from HEK293T cells transfected with SNTG2 cDNA clone (Cat# RC222968) using MegaTran 2.0 (Cat# [TT210002]).