

Product datasheet for **RG205963**

Synaptotagmin 3 (SYT3) (NM_032298) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Synaptotagmin 3 (SYT3) (NM_032298) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Synaptotagmin 3
Synonyms:	SytIII
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG205963 representing NM_032298
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGTCAGGAGACTACGAGGATGACCTCTGCCGGCGGCACTCATCTGGTCTCGACCTCTGTGCGCGGG
 TCCGAGATGCTGACACCAACGACAGGTGCCAGGAGTTCAATGACCGAATCCGAGGCTATCCCGGGGTCC
 AGATGCAGACATCTCCGTGAGCCTGCTGTCCGTATCGTGACATTCTGTGGCATTGTCTCTCGGTGTC
 TCTCTCTCGTGTCTGGAAGTTGTGCTGGGTGCCCTGGCGGGACAAGGGAGGCTCGGCAGTGGCGGGT
 GCCCCTGCGCAAAGACCTAGGCCCTGGTGTGGGCTGGCAGGCTGGTAGGGGAGGCGGGCACCACCT
 GGCGGCTGGCCTGGTGGCCATCTCTGCTGGCGGCCACACCACCATGCCATGCCGCCACCATCCA
 CCCTTTGCTGAGTGTGGAGCCAGGCAGCCTGGGGGTCTGACACCCCTGAGCCCTCTACTTGGACA
 TGGACTCGTATCCAGAGGCTGCAGCAGCAGCAGTGGCCGCTGGGGTCAAACCGAGCCAAACATCCCTGA
 GCTGCCCTCTGAGGGGGAGCAGGCTCTGGGTTGCTCTGCTGCCCCAGTGGTGGGGCTTGCCAGT
 GCCCAGTCACATCAGCAGGTCACAAGCCTGGCACCCACTACCAGGTACCCAGCCCTGCCCGACCCCTCA
 CCCAGCAGACTCTGACCTCCCAGCCGGACCCAGCAGTGAAGGAGCGCCACCTGCCTGCCTTACCCTT
 GCCTGGAGGCGAGGAAAAGCCAAACTCATTGGGCAGATTAAGCCAGAGCTGTACCAGGGGACTGGCCCT
 GGTGGCCGGCGGAGCGGTGGGGGCCAGGCTCTGGAGAGGCAGGCACAGGGGCACCCTGTGGCCGTATCA
 GCTTCGCCTGCGGTACCTCTATGGCTCGGACCAGCTGGTGGTGAAGATCCTGCAGGCCATGGACCTCCC
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 CATCGCCAGGTGGTGTGGACAACCTCCTGGAGCTGGCCGAGCAGCCCTGACCGCCGCTCTGGAGG
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 CGGCCGGCGCCTCACCGTGACCATCATAAAGCCTCTAACTCAAAGCGATGGACCTACTGGCTTCTC
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 AAGAACACGCTGAACCCACCTATAATGAGGCGTGGTGTTCGACGTGGCCCGGAGAGCGTGGAGAACG
 TGGGGCTCAGCATCGCCGTGGTGGACTACGACTGCATCGGGCACAACGAGGTGATCGGCGTGTGCCGTGT
 GGGCCCGACGCTGCCGACCCGACGGCCGCGAGCACTGGGCAGAGATGCTGGCCATCCCCGAAGCCC
 GTGGAGCACTGGCATCAGCTAGTGGAGAAAAGACTGTGACCAGCTTACAAAAGGCAGCAAAGGACTAT
 CAGAGAAAAGAACTCCGAG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

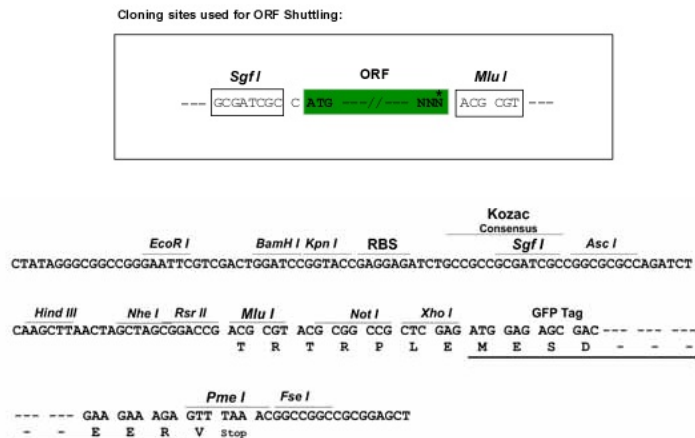
>RG205963 representing NM_032298
 Red=Cloning site Green=Tags(s)

MSGDYEDDLRRALILVSDLCARVRDADTNDRCQEFNDRIRGYPRGPDADISVSLSSVIVTFCGIVLLGV
 SLFVSWKLCWVPWRDKGGSVAVGGPLRKDLGPGVGLAGLVGGGHHLAAGLGGHPLLGGPHHHAHAHHP
 PFAELLEPGSLGGSDTPEPSYLDMSYPEAAAAVAAGVKPSQTSPELPSEGGAGSGLLLLPPSGGGLPS
 AQSHQQVTS LAPTTRYPALPRPLTQQTLSQPDPSSSEERPPALPLPLPGGEEKAKLIGQIKPELYQGTGP
 GRRRSGGPGSGEAGTGAPCGRISFALRYLYGSDQLVVRILQAMDLPKDSNGFSDPYVKIYLLPDRKKK
 FQTKVHRKTLNPFVNETFQFSVPLAELAQRKLFHFSVYDFDRFSRHDLIGQVVDLNLLELAEQPPDRPLWR
 DIVEGGSEKADLGELNFSLYLPTAGRLTVTIKASNLKAMDLTGFSDPYVKASLISEGRRLLKRRKTSIK
 KNTLNPTYNEALVFDVAPESVENVGLSIAVVDYDCIGHNEVIGVCRVGPDAADPHGREHWAEMLANPRKP
 VEHWHLVVEEKTVTSFTKSGKGLSEKENSE

TRTRPLE - GFP Tag - V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_032298

ORF Size: 1770 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_032298.1](#), [NP_115674.1](#)

RefSeq Size: 2931 bp

RefSeq ORF: 1773 bp

Locus ID: 84258

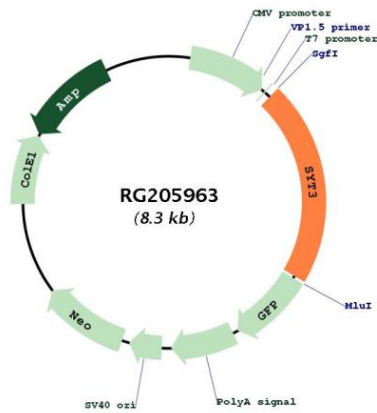
UniProt ID: [Q9BQG1](#)

Cytogenetics: 19q13.33

Protein Families: Secreted Protein, Transmembrane

Gene Summary: Ca(2+) sensor involved in Ca(2+)-dependent exocytosis of secretory vesicles through Ca(2+) and phospholipid binding to the C2 domain. Ca(2+) induces binding of the C2-domains to phospholipid membranes and to assembled SNARE-complexes; both actions contribute to triggering exocytosis (By similarity). Plays a role in dendrite formation by melanocytes (PubMed:23999003).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RG205963