

Product datasheet for **RG228466**

Synaptotagmin 14 (SYT14) (NM_001146262) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	TurboGFP
Symbol:	Synaptotagmin 14
Synonyms:	SCAR11; sytXIV
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



ORF Nucleotide Sequence: >RG228466 representing NM_001146262
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAAACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCGCGATCGCC

ATGGCGATTGAAGGTGGAGAGAGAACCTGTGGAGTACATGAACTTATCTGTATTAGAAAAGTATCTCCAG
 AGGCAGTTGGATTTTGTGAGCTGTTGGGGTGTATTATCTTGATGCTGCTCCTTTTCTCTATATTAA
 TAAGAAGTTCTGTTTGAAGTGTGGCGGGTTCCAGATCTTGTTTCAGAAATACAGTACAAGGAAGAAT
 TCACAAGATAAAATTTATAATTCCTACATGGACAAAGATGAGCATGGTTCATCCTCTGAAAGTGAAGATG
 AAGCGCTGGTAAATATCATGAGGCCTTATCCAGAACACACAATCCAGACTACCACTGGCAGATTCTAG
 ACAAGGAACCTATGCTTGGGAAACAAGGCAGAAATACAGTCCTCTATCGGCAGAGTATGATGGATACAGT
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 AGCCACCACCATATCAGGATGACAGTGGTCTCCCATCTGTATGTACACCTCAGAAATTGGGGACAG
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 AAATGTCATTGCCTGTGATATTGGAACCTTCTTACAATCATTCTGGCTGTGACTCCCAATGAGCGTGTCT
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 ACATCCATCCGCAGAGGGCAGCCAAATCCAGTATATAAGGAACTTTTGTCTTTCAAGTGGCCCTATTTT
 AGCTTTCTGATGTGACACTCATACTGTCTGTGTATAACAAACGCAGCATGAAAAGAAAAGAGATGATAGG
 CTGGATTTCTTTAGGTCTCAACAGCTCTGGAGAAGAAGAACTCAATCACTGGACTGAAATGAAAGAGTCA
 AAAGGACAGCAAGTATGTAGATGGCATGCGTTGCTAGAGTCA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

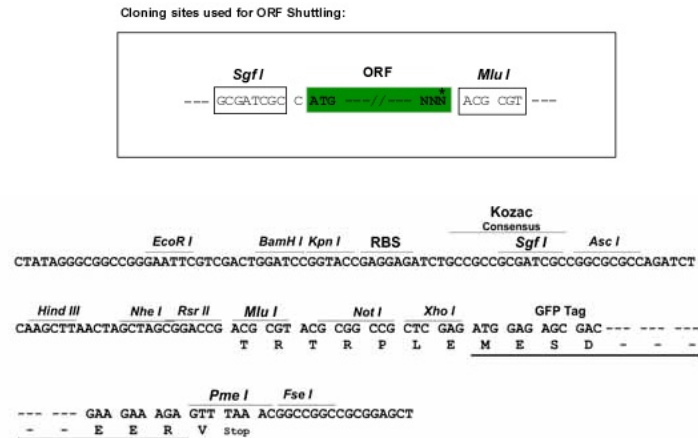
Protein Sequence: >RG228466 representing NM_001146262
 Red=Cloning site Green=Tags(s)

MAIEGGERTCGVHELICIRKVSPEAVGFLSAVGVFIIILMLLLFLYINKKFCFENVGGFDPDLGSEYSTRKN
 SQDKIYNSYMDKDEHGSSESEDEALGYHEALSRTHNSRLPLADSRQRNYAWETRQKYSPLSAEYDGYS
 SEASIDEGNCIQRMRTPLDELQPPPYQDDSGSPHLSCTPSEIGDSKCEFSHCSNSPRCSYNKCPSEGS
 TGHEIESFHNKGYEEDVPSDSTAVLSPEDMSAQGSSSQLPKPFDPEPEAKYGLDVTDFDYDSQEQKLLVT
 VTAVTDIPTYNRTGGNSWQVHLVLLPIKKQRAKTSIQRGPCPVFTETFKFNHVESEMIGNYAVRFRLYGV
 HRMKKEKIVGEKIFYLTKLNLQGMKSLPVILEPSYNHSGCDSQMSVSEMSCSESTSSQSLEHGSVPEIL
 IGLLYNATTGRLSAEVIKGSFKNLAANRPPNGLFCCLKHLIGGQVYIIRDTYVKLLNSMGQEMSKCK
 TSIRRGQPNPVYKETFFVQVALFQLSDVTLILSVYNKRSMKRKEMIGWISLGLNSSGEEELNHWTEMKES
 KGQQVCRWHALLES

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001146262

ORF Size: 1722 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_001146262.3](#)

RefSeq Size: 5046 bp

RefSeq ORF: 1725 bp

Locus ID: 255928

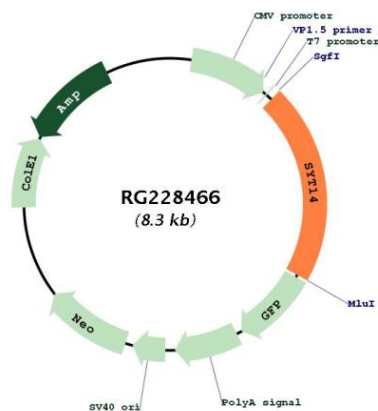
UniProt ID: [Q8NB59](#)

Cytogenetics: 1q32.2

Protein Families: Transmembrane

Gene Summary: This gene is a member of the synaptotagmin gene family and encodes a protein similar to other family members that mediate membrane trafficking in synaptic transmission. The encoded protein is a calcium-independent synaptotagmin. Mutations in this gene are a cause of autosomal recessive spinocerebellar ataxia-11 (SCAR11), and a t(1;3) translocation of this gene has been associated with neurodevelopmental abnormalities. Alternatively spliced transcript variants encoding multiple isoforms have been observed for this gene, and a pseudogene of this gene is located on the long arm of chromosome 4. [provided by RefSeq, Dec 2011]

Product images:



Circular map for RG228466