

Product datasheet for **RC223923**

Synaptotagmin 14 (SYT14) (NM_153262) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	Myc-DDK
Symbol:	Synaptotagmin 14
Synonyms:	SCAR11; sytXIV
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



ORF Nucleotide Sequence: >RC223923 representing NM_153262
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCGCGATCGCC

ATGGCGATTGAAGGTGGAGAGAGAACCTGTGGAGTACATGAACTTATCTGTATTAGAAAAGTATCTCCAG
 AGGCAGTTGGATTTTGTGAGCTGTTGGGGTGTATTATCTTGATGCTGCTCCTTTTCTCTATATTAA
 TAAGAAGTTCTGTTTGAAGTGTGGCGGGTTCCAGATCTTGTTTCAGAAATACAGTACAAGGAAGAAT
 TCACAAGATAAAATTTAATTCCTACATGGACAAAGATGAGCATGGTTCATCCTCTGAAAGTGAAGATG
 AAGCGCTGGGTAATATCATGAGGCCTTATCCAGAACACACAATCCAGACTACCACTGGCAGATTCTAG
 ACAAAGGAACCTATGCTTGGGAAACAAGGCAGAAATACAGTCCTCTATCGGCAGAGTATGATGGATACAGT
 AGTGAAGCATCAATAGATGAAGGAACTGCATTGAGAGAAATGAGAAGAACACCCCGCTGGATGAATTGC
 AGCCACCACCATATCAGGATGACAGTGGTCTCCCATCTGTGATGTACACCCTCAGAAATGGGGACAG
 TAAATGTGAATTTCCCACTGCAGCAACAGTCCAAGATGCTCATATAACAAGTCCCAAGTGAAGGAAGC
 ACAGGTCATGAAATAGAAAGTTTTCATAATAAAGGATATGAAGAAGATGTTCCAAGTACAGCACTGCAG
 TCCTGAGCCCTGAAGATATGTCAGCTCAAGGATCATCTTCGAGCTTCCTAAACCTTTTGATCCTGAGCC
 AGAAGCTAAATATGGCACACTGGATGTGACTTTTGACTATGACTCACAAGAACAGAAGCTTCTGGTAACA
 GTGACAGCTGTACAGACATCCCAACATATAACAGGACAGGTGGCAACTCATGGCAAGTACACCTTGTTCT
 TTCTACCTATAAAGAAACAGAGAGCAAAACCAGCATCCAGAGAGGACCATGCCCTGTCTTCACAGAAAC
 ATTTAAATTTAATCATGTTGAATCTGAGATGATTGGAATTATGCAGTTCGGTTTAGACTGTATGGTGTA
 CATCGCATGAAAAAGAAAAGATTGTGGGGGAAAAGATTTTTTATTTAACAAATTTGAATCTTCAAGGGA
 AAATGTCATTGCCGTGATATTGGAACCTTCTTACAATCATTCTGGCTGTGACTCCCAATGAGCGTGTG
 AGAAATGTCGTGTAGTGAAGTACATCCTCATGTGAGTCTCTTGAACATGGCTCAGTTCCAGAAATCTT
 ATTGGCCTGCTTTATAATGCCACAACCTGGAAGACTATCAGCAGAAGTGATAAAGGCAGCCACTTCAAAA
 ATTTGGCAGCAACAGACCACCAATACATATGTTAAGTTAACTCTACTGAATTCATGGGTCAAGAGAT
 GTCCAAATGCAAGACATCCATCCGAGAGGGCAGCCAAATCCAGTATATAAGGAACTTTTGTCTTTCAA
 GTGGCCCTATTTACGCTTCTGATGTGACACTCATACTGTCTGTGTATAACAAACGCAGCATGAAAAGAA
 AAGAGATGATAGGCTGGATTTCTTTAGGTCTCAACAGCTCTGGAGAAGAAGAACTCAATCACTGGACTGA
 AATGAAAGAGTCAAAGGACAGCAAGTATGTAGATGGCATGCGTTGCTAGAGTCA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC223923 representing NM_153262
 Red=Cloning site Green=Tags(s)

MAIEGGERTCGVHELICIRKVSPEAVGFLSAVGVFIIILMLLLFLYINKKFCFENVGGFDPDLGSEYSTRKN
 SQDKIYNSYMDKDEHSSSESEDEALGKYHEALSRTHNSRLPLADSRQRNYAWETRQKYSPLSAEYDGYS
 SEASIDEGNCIQMRRTPLDELQPPYQDDSGSPHLSCTPSEIGDSKCEFSHCSNSPRCSYNKCPSEGS
 TGHEIESFHNKGYEEDVPSDSTAVLSPEDMSAQGSSSQLPKPFDPEPEAKYGLTDVTFDYDSQEQLLVT
 VTAVTDIPTYNRTGGNSWQVHLVLLPIKKQRAKTSIQRGPCPVFTETFKFNHVESEMIGNYAVRFRLYGV
 HRMKKEKIVGEKIFYLTKLNLQGMSPVILEPSYNHSGCDSQMSVSEMSCSESTSSQSLEHGSVPEIL
 IGLLYNATTGRLSAEVIKGSFKNLAANRPNTYVKLLNSMGQEMSKCKTSIRRGQPNPVYKETVFVQ
 VALFQLSDVTILSVYNKRSMKRKEMIGWISLGLNSSGEEELNHWTEMKESKGQVCRWHALLES

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8067_a10.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_153262

ORF Size: 1665 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_153262.4](#)

RefSeq Size: 2960 bp

RefSeq ORF: 1668 bp

Locus ID: 255928

UniProt ID: [Q8NB59](#)

Cytogenetics: 1q32.2

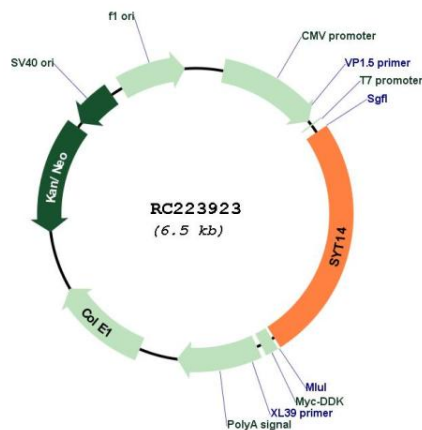
Domains: C2

Protein Families: Transmembrane

MW: 62.1 kDa

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 RC223923