

Product datasheet for **RC228484**

Synaptotagmin 14 (SYT14) (NM_001146264) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Synaptotagmin 14 (SYT14) (NM_001146264) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Synaptotagmin 14
Synonyms:	SCAR11; sytXIV
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC228484 representing NM_001146264
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGC**

ATGGCGAGCGCATCATGGCGATTGAAGGTGGAGAGAGAACCTGTGGAGTACATGAACTTATCTGTATTAG
 AAAAGATAGGGTATTTCTCTGTGGCCAGGCTGGAGTACAGTGGCACCATCTTGGCTCACTGCAACTCCG
 CCTCCTGGGTTCAAACGATTCTTCTGCCTCAGCATCCCAAGTAACGGGACTACAGTATCTCCAGAGGCA
 GTTGGATTTTTGTGAGCTGTTGGGGTGTATTATCTTGATGCTGCTCCTTTTCTATATTAATAAGA
 AGTTCTGTTTTGAAAATGTTGGCGGTTTCCAGATCTTGGTTCAGAATACAGTACAAGGAAGAATTCACA
 AGATAAAATTTATAATTCCTACATGGACAAAGATGAGCATGGTTCATCCTCTGAAAGTGAAGATGAAGCG
 CTGGGTAAATATCATGAGGCCTTATCCAGAACACACAATTCAGACTACCACTGGCAGATTCTAGACAAA
 GGAATATGCTTGGGAAACAAGGCAGAAATACAGTCTCTATCGCAGAGTATGATGGATACAGTAGTGA
 AGCATCAATAGATGAAGGAACTGCATTGAGAGAATGAGAAGAACCCCCGCTGGATGAATTGCAGCCA
 CCACCATATCAGGATGACAGTGGTCTCCCCATCTGTCATGTACACCCTCAGAAATTGGGGACAGTAAAT
 GTGAATTTTCCCACTGCAGCAACAGTCCAAGATGCTCATATAACAAGTGCCCAAGTGAAGGAAGCACAGG
 TCATGAAATAGAAAGTTTTCAATAAAGGATATGAAGAAGATGTTCCAAGTGACAGCACTGCAGTCCTG
 AGCCCTGAAGATATGTCAGCTCAAGGATCATCTTCGAGCTTCTTAAACCTTTTGATCCTGAGCCAGAAG
 CTAATATGGCACACTGGATGTGACTTTTGACTATGACTCACAAGAACAGAAGCTTCTGGTAACAGTGAC
 AGCTGTCACAGACATCCCAACATATAACAGGACAGGTGGCAACTCATGGCAAGTACACCTTGTCTTCTA
 CCTATAAAGAAACAGAGAGCAAAAACAGCATCCAGAGAGGACCATGCCCTGTCTTCACAGAAACATTTA
 AATTTAATCATGTTGAATCTGAGATGATTGGAATTTATGCAGTTCGGTTTAGACTGTATGGTGTACATCG
 CATGAAAAAAGAAAAGATTGTGGGGGAAAAGATTTTTTATTTAAACAAAATTGAATCTTCAAGGGAAAATG
 TCATTGCCTGTGATATTGGAACCTTCTTACAATCATTCTGGCTGTGACTCCCAATGAGCGTGTAGAAA
 TGTCTGTAGTGAAGTACATCCTCATGTCAGTCTCTTGAACATGGCTCAGTTCCAGAAATCTTATTGG
 CCTGCTTTATAATGCCCAACTGGAAGACTATCAGCAGAAGTGATAAAGGCAGCCACTTCAAAAATTTG
 GCAGCAACAGACCACCAATACATATGTTAAGTTAACTCTACTGAATCCATGGGTCAAGAGATGTCCA
 AATGCAAGACATCCATCCGAGAGGGCAGCCAAATCCAGTATATAAGGAACTTTTGTCTTTCAAGTGGC
 CCTATTTAGCTTTCTGATGTGACACTCATACTGTCTGTGTATAACAAACGCAGCATGAAAAGAAAAGAG
 ATGATAGGCTGGATTTCTTTAGGTCTCAACAGCTCTGGAGAAGAAGAACTCAATCACTGGACTGAAATGA
 AAGAGTCAAAGGACAGCAAGTATGTAGATGGCATGCGTTGCTAGAGTCA

ACGCGTACGCGGCGGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC228484 representing NM_001146264
 Red=Cloning site Green=Tags(s)

MASASWRLKVEREPVEYMNLSVLEKIGYFSVARLEYSGLAHNCNFRLLGSNDSSASASQVTGTTVSPEA
 VGFLSAVGVFIIIMLLFLYINKKFCFENVGGFPDLGSEYSTRKNSQDKIYNSYMDKDEHSSSESEDEA
 LGKYHEALSRTHNSRLPLADSRQRYAWETRQKYSPLSAEYDGYSEASIDEGNCIQMRRTPLDELQP
 PPYQDDSGSPHLSTPSEIGDSKCEFSHCSNSPRCSYNKCPSEGSTGHEIESFHNKGYEEDVPSDSTAVL
 SPEDMSAQGSSSQLPKPFDPEPEAKYGLDVTDFDYDSQEQKLLVTAVTDIPTYNRTGGNSWQVHLVLL
 PIKKQRAKTSIQRGPCPVFTETFKFNHVESEMIGNYAVRFRLYGVHRMKKEKIVGEKIFYLTKLNLQGKM
 SLPVILEPSYNHSGCDSQMSVSEMSCSESTSSCQSLHGSVPEILIGLLYNATTGRLSAEVIKGSHFKNL
 AANRPPNTYVKLTLLNSMGQEMSKCKTSIRRGQPNPVYKETFFVQVLFQLSDVTLILSVYNKRSMKRKE
 MIGWISLGLNSSGEEELNHWTEMKESKGQQVCRWHALLES

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/ja1130_e11.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001146264

ORF Size: 1800 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_001146264.3](#)

RefSeq ORF: 1803 bp

Locus ID: 255928

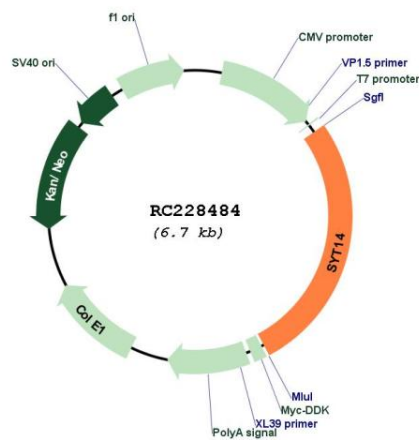
Cytogenetics: 1q32.2

Protein Families: Transmembrane

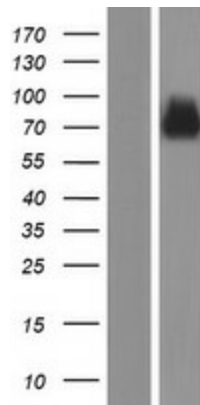
MW: 67 kDa

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 RC228484



Western blot validation of overexpression lysate (Cat# [LY431512]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC228484 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).