

## Product datasheet for **RC206304**

### Synaptotagmin 4 (SYT4) (NM\_020783) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Synaptotagmin 4 (SYT4) (NM_020783) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Synaptotagmin 4
Synonyms:	HsT1192
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>RC206304 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGGCTCCGATCACCACCAGCCGGGAAGAATTTGATGAAATCCCCACAGTGGTGGGGATCTTCAGTGCAT  
 TTGGCCTGGTCTTCACAGTCTCTCTCTTTGCATGGATCTGCTGTGAGAGAAAATCATCCAAGTCTAACAA  
 GACTCCTCCATACAAGTTTGTCATGTGCTTAAGGGAGTTGATATTTACCCTGAAAACCTAAATAGCAAA  
 AAGAAGTTTGAGCAGATGATAAAAATGAAGTAAAGAATAAGCCAGCTGTGCCAAAGAATTCATTGCATC  
 TGGATCTTGAAAAGAGAGATCTCAATGGCAATTTCCCAAACCAACCTCAAACCTGGCAGTCTTCTGA  
 TCTGGAGAATGCAACCCCGAAGCTCTTTTAGAAGGGGAAAAAGAGTCAGTTTCCCCTGAGAGTTTAAAG  
 TCCAGCACTTCCCTTACTTCAGAAGAGAAAACAAGAGAAGCTGGAACTCTTCTTCTCCTTAGAATACA  
 ACTTCGAGAGAAAAGCATTGTGGTCAATATCAAGGAAGCCCGTGGCTTCCAGCCATGGATGAGCAGTC  
 GATGACCTCTGACCCATATATCAAAATGACGATCTCCAGAGAGAAGAAGCATAAAGTAAAACCTAGAGTG  
 CTGAGAAAAACCTTGGATCCAGCTTTTGTGATGAGACCTTTACATTCATGGGATACCTACACACAAATCC  
 AAGAATTGGCCTTGCATTCACAATTTTGGATTTTACAGGTTTTCAAGAGATGATATCATTGGGGAGT  
 TCTAATTCCTCTCTCGGGAATTGAATTATCTGAAGGAAAAATGTTAATGAATAGAGAGATCATCAAGAGA  
 AATGTTAGGAAGTCTTCAGGACGGGGTGAAGTACTGATCTCTCTGCTATCAGTCCACCACAAACACTC  
 TAACTGTGGTGTCTTAAAAGCTCGACATCTGCCTAAATCTGATGTGTCCGGACTTTCAGATCCCTATGT  
 CAAAGTGAACCTGTACCATGCCAAAAGAGAATCTCCAAGAAGAAGACTCATGTGAAGAAATGCACCCCC  
 AATGCAGTGTCAATGAGCTGTTTGTCTTTGATATCCTTGTGAGGGCCTTGAAGATATAAGTGTGAAT  
 TTTTGGTTTTGGATTCTGAAAGGGGGTCCCGAAATGAGGTAATCGGGCAGTTAGTCTTGGGTGCAGCAGC  
 AGAAGGAACTGGTGGAGAGCACTGAAAAGAGATCTGTGACTACCCAGGAGACAAATTGCCAAGTGGCAC  
 GTGCTCTGTGATGGT

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC206304 protein sequence  
 Red=Cloning site Green=Tags(s)

MAPITTSREEFDEIPTVVGIFSAFGLVFTVSLFAWICQQRKSSKSNKTPPYKRVHVLKGVDIYPENLNSK  
 KKFAGDDKNEVKNKPAVPKNSLHLDLEKRDNLGNFPKTNLKPGSPSDLENATPKLFLEGEKESVSPESLK  
 SSTSLTSEEKQELGTLFFSLEYNFERKAFVNIKEARGLPAMDEQSMTSDPYIKMTILPEKHKVTRV  
 LRKTLDPAFDETFYFYGIPYTQIQELALHFTILSFDRFSRDDIIGEVLIPLSGIELSEGKMLMNREIKR  
 NVRKSSRGELLISLCYQSTNTLTVVVLKARHLPKSDVSGLSDPYVKVNLVYHAKKRISKKTHVKKCTP  
 NAVFNELFVFDIPCEGLDISVEFLVLDSEGRSNEVIGQLVLGAAAEVGGEGHWKEICDYPRRQIAKWH  
 VLCDG

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mk6318\\_g10.zip](https://cdn.origene.com/chromatograms/mk6318_g10.zip)

**Restriction Sites:**

Sgfl-Mlul

**Cloning Scheme:**


**ACCN:** NM\_020783

**ORF Size:** 1275 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\\_020783.2](#), [NP\\_065834.1](#)

**RefSeq Size:** 4111 bp

**RefSeq ORF:** 1278 bp

**Locus ID:** 6860

**UniProt ID:** [Q9H2B2](#)

**Cytogenetics:** 18q12.3

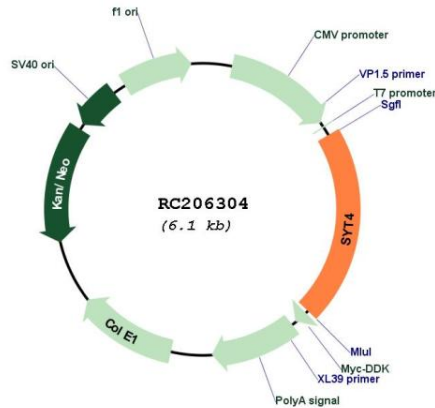
**Domains:** C2

**Protein Families:** Secreted Protein, Transmembrane

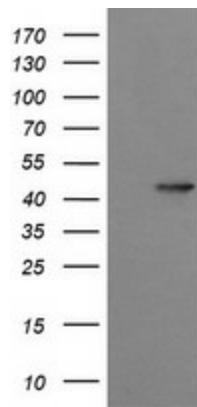
**MW:** 48 kDa

**Gene Summary:** May be involved in Ca(2+)-dependent exocytosis of secretory vesicles through Ca(2+) and phospholipid binding to the C2 domain or may serve as Ca(2+) sensors in the process of vesicular trafficking and exocytosis (By similarity). Plays a role in dendrite formation by melanocytes (PubMed:23999003).[UniProtKB/Swiss-Prot Function]

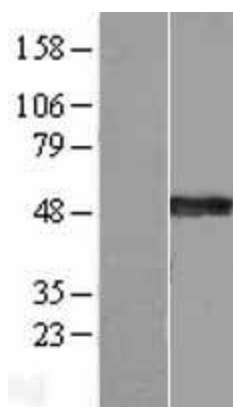
**Product images:**



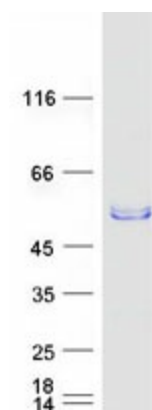
Circular map for RC206304



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY SYT4 (Cat# RC206304, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-SYT4 (Cat# [TA505862]). Positive lysates [LY412338] (100ug) and [LC412338] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY412338]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC206304 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified SYT4 protein (Cat# [TP306304]). The protein was produced from HEK293T cells transfected with SYT4 cDNA clone (Cat# RC206304) using MegaTran 2.0 (Cat# [TT210002]).