

Product datasheet for **RC217658**

SYT10 (NM_198992) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SYT10 (NM_198992) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	SYT10
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC217658 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGAGTTTCCACAAGGAGGACGGAGTGAACAGTCTGTGCCAGAAGGCTCTGCACATCGTCACCGAGCTGT
 GCTTCGCGCGCCAGGTGGAGTGGGAGAAGTGCTCGGGCATCTTCCTCGGGACAGGGGCAGCCAGGGCGG
 AAGCAGACAGATATTTAGTCAGCCTGTTAGCTGTCGTTGTCAGCTTTTGTGGACTGGCCTTGTGGTT
 GTCTCACTTTTGTCTTCTGGAAGCTGTGTTGGCCATGCTGAAAAGCAAACCTGTGACTTCCAACATCA
 CTACGCTTCCACAGAGCATTTCAAGTGCTCTACTGAAGTTTTTGAGACTGAAGAGAAAAAGAAATTAA
 GGAAAAATGAAAGCCAGCCGTAAGGCTATTGAGCCTGCAATAAAAAATCAGCCACACTTCCCCTGACATC
 CCAGCAGAAGTCCAACTGCTTTAAAGAACATTTAATTAAACATGCACGTGTGCAAAGACAAATTACTG
 AGCCTACGTCATCAACCCGCCACAGTTCCTTCCGAAGACACCTGCCGAGGCAAATGCAGGTTTCCAGTGT
 TGATTTTAGCATGGGCACAGAACCTGTTTACAACGAGGAGAAACAACACAGCATTGGGAGGATAAAG
 CCAGAACTCTACAAACAGAAATCAGTTGACTCTGAGGGCAACCAAAACGAAGATGTCAAAATCTGTGGGA
 AACTTAACTTTACCTCCAGTATGATTATGAAATGAACTTCTAGTTGTTAAATTTATCAAAGCTTTAGA
 TCTCCCTGCTAAAGACTTACAGGAACCTTCTGACCCTTATGTGAAGATGTATCTTCTCCAGATAGGAAA
 AAGAAATTTAGACCCCGGTGCACAGAAAGACTTTAAATCCTCTATTTGATGAACTTTTCAATTTCTCTG
 TAGCATATGATCAACTAAGCAACCGAAACTACATTTAGTGTGTATGATTTTGACAGATTTTCTAGACA
 TGACATGATTGGGAAGTGATTCTTGATAATTTGTTTGAAGTCTCTGATCTCTCCAGGGAAGCCACAGTA
 TGGAAAGATATCACTGTGCTACCACAGAAAGTATAGACCTGGGTGAAATCATGTTTCCCTTTGTTACC
 TACCGACGGCTGGCGTATGACATTGACAGTCATTAAGTGCAGAAATCTGAAGGCGATGGATATTACTGG
 CTCATCAGATCCTTATGTCAAAGTGCCCTGATGTGTGAAGTGAAGATTAAAAAGAGGAAACAACT
 ACAAAGAAAAAACTCTAAACCTGTGTACAATGAGGCCATTATTTTGCATCCCTCCAGAGAAGCTGG
 ACCAGGTGAGCTCTCCATTGCGGTGATGATTACGATAGGGTAGGACACAATGAGGTGATAGGAGTGTG
 CAGAACAGGACTGGATGCTGAGGTCTTGGCGAGACCACTGGAATGAAATGCTGGCCTATCATCGAAAA
 CCAATAACGCACTGGCACCCATTGCTGGAGTTACCTGGCCGGCGACAGTTTGTAGTCAAGGATCCT
 GCCCTTCTCTAAACACCTTCCACACCA

ACGCGTACGCGGCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC217658 protein sequence
 Red=Cloning site Green=Tags(s)

MSFHKEDGVNSLCQKALHIVTELCFAGQVEWEKCSGIFPRDRGSQGSSTDISVSL LAVVVSFCGLALLV
 VSLFVFWKLCWPCWKSKPVTSNITTLQSISSAPTEVFETEEKKEIKENEKPAVKAIEPAIKISHTSPDI
 PAEVQTALKEHLIKHARVQRQITEPTSSRHSFRRHLPRQMVSVDVSMGTEPVLQRGETTTTSGRIK
 PELYKQKQSVDSGNQEDVKICGLNFTLQYDYENELLVVKI IKALDLPKDFGTGSDPYVKMYLLPDRK
 KKFQTRVHRKTLNPLFDETFQFPVAYDQLSNRKLHFSVYDFDRFSRDMIGEIVLDNLFEVSDLREATV
 WKDIHCATTESIDLGEIMFSLCYLPTAGRMTLTVIKCRNLKAMDITGSSDPYVKVSLMCEGRRLKKRKT
 TTKNTLNPVYNEAIIIFDIPPENVDQVLSIAVMDYDRVGHNEVIGVCRTGLDAEGLGRDHWNEMLAYHRK
 PITHWHPLLELPGRATSFDSQGSPPKPPSTP

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6602_d08.zip

Restriction Sites:

Sgfl-MluI

Cloning Scheme:



ACCN: NM_198992

ORF Size: 1569 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_198992.4](#)

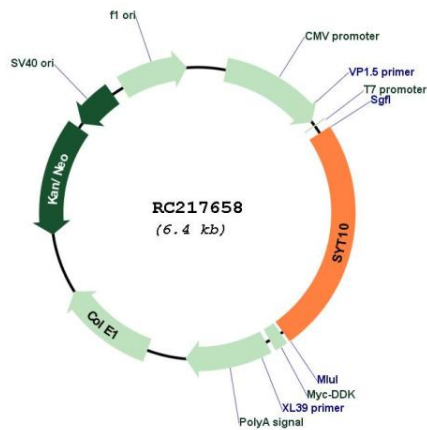
RefSeq Size: 3286 bp

RefSeq ORF: 1572 bp

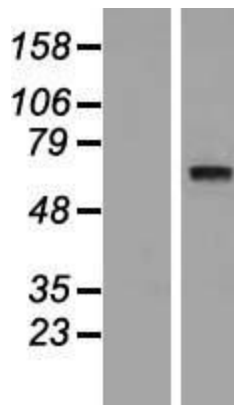
Locus ID: 341359

UniProt ID:	<u>Q6XYQ8</u>
Cytogenetics:	12p11.1
Protein Families:	Secreted Protein, Transmembrane
MW:	59.1 kDa
Gene Summary:	Ca(2+) sensor specifically required for the Ca(2+)-dependent exocytosis of secretory vesicles containing IGF1 in neurons of the olfactory bulb. Exocytosis of IGF1 is required for sensory perception of smell. Not involved in Ca(2+)-dependent synaptic vesicle exocytosis (By similarity). Acts 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).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RC217658



Western blot validation of overexpression lysate (Cat# [LY404705]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC217658 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).