

Product datasheet for **RC208528**

Synaptotagmin V (SYT5) (NM_003180) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Synaptotagmin V (SYT5) (NM_003180) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Synaptotagmin V
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC208528 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGTTCCCGAGCCCCAACCCGGGGCCTCCATCGCCGACACGCCTCCCGACTCCAGTCGCATCAGCC
ACGGCCCAGTGCCCCCTGGGCCCTGGCCACCATCGTGTGGTCTCAGGCCTCCTCATCTTCAGCTGCTG
TTTCTGTCTCTACCGAAGAGCTGTCTGGAGCGGACAGGCAAGAAGAGCCAGGCCCAAGCCAGGTCCAC
CTTCAGGAAGTGAAGGGGCTGGCCAGAGTTACATAGACAAGGTGCAGCCAGAAGTAGAGGAGCTGGAGC
CAGCACCATCCGGGCCAGGGCAGCAGGTGGCAGACAAGCATGAGCTAGGACAACCTGCAGTACTCCCTGGA
TTATGACTTCCAGAGTGGCCAGCTGCTGGTGGGATTCTGCAAGCAATGGGATTGGCAGCCTTGGATCTT
GGTGGCTCCTCGGACCCCTATGTGCGGGTCTACCTGCTGCCGGACAAACGGAGGCGGTACGAGACCAAGG
TGCATCGGCAGACGCTGAACCCTCACTTTGGGAGACCTTCGCCTTCAAGGTCCCCTACGTGGAGCTGGG
GGGCAGGGTGTGGTTCATGGCGGTGTACGACTTCGACCGTTCTCTCGCAATGACGCCATCGGGGAGGTG
CGGGTCCCTATGAGCTCCGTGGACCTGGGGCGGCCAGTGCAGGCCTGGCGGGAGCTGCAGGCGGCTCCGC
GGGAGGAGCAGGAGAAGCTTGGGACATCTGCTTCTCCCTCCGCTATGTCCCCACGGCCGGGAAGCTCAC
CGTCATCGTCTGGAGGCTAAAACTGAAGAAGATGGACGTAGGAGGACTGTGAGTCCATACGTCAGG
GTCCACCTGCTGCAGGGCGCAAAAAGGTGCGGAAGAAGAAAACCACCATCAAGAAGAAGCACTCTGAACC
CCTATTACAACGAAGCTTTCAGCTTCGAGGTGCCCTGTGACCAAGTCCAGAAGGTGCAGGTGGAGCTGAC
CGTGTGGACTACGACAAGCTGGCAAGAACGAGGCCATCGGGAGGGTGGCCGTGGGGGGCGGCCCGCCG
GGGGTGGCTGCGGCACTGGGCGGACATGCTGGCCAACCCGCGGGGCCATTGCCAGTGGCACTCGC
TGGGCCCCCGGACCGAGTGAGGCTGCTGCCTGCGCCC

ACGCGTACGCGGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC208528 protein sequence
Red=Cloning site Green=Tags(s)

MFPEPPTPGPPSPDTPDSSRISHGPVPPWALATIVLVSGLLIFSCCFLYRKSCRRTGKKSQAQAQVH
 LQEVKGLGQSYIDKVQPEVEELEPAPSGPGQVADKHELGLQYSLDYDFQSGQLLVGILQAMGLAALDL
 GGSSDPYVRVYLLPDKRRRYETKVHRQTLNPHFGETFAFKVPYVELGGRVLMVAVYDFDRFSRNDIAGEV
 RVPMSVDLGRPVAWRELQAAPREEQEKLGDI CFSLRVYPTAGKLTIVIVLEAKNLKKMDVGGLSDPYVK
 VHLLQGGKKVRKKKTTIKKNTLNPHYNEAFSFEVPCDQVQKVQVELTVLDYDKLGKNEAIGRVAVGAAAG
 GAGLRHWADMLANPRRPIAQWHSRPPDRVRLLPAP

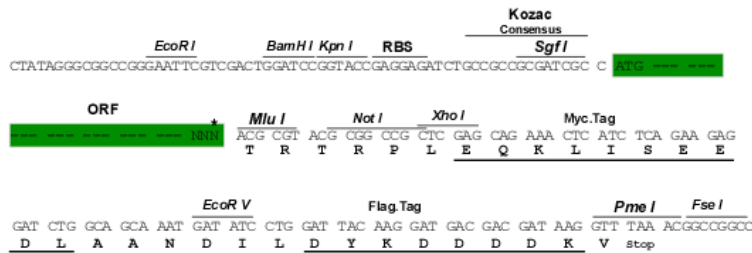
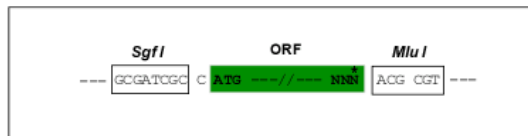
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6349_e02.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_003180

ORF Size: 1158 bp

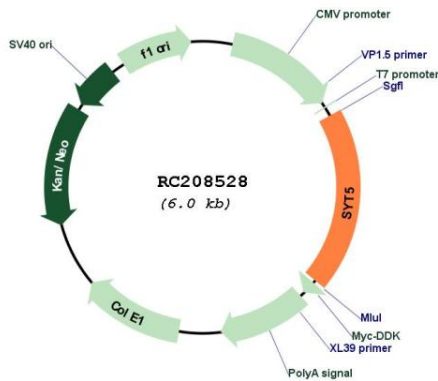
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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.

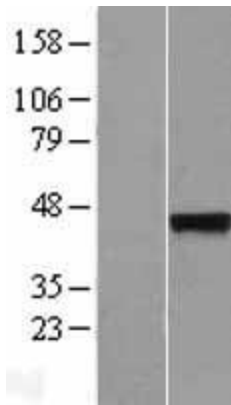
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:	<ol style="list-style-type: none">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_003180.3
RefSeq Size:	1853 bp
RefSeq ORF:	1161 bp
Locus ID:	6861
UniProt ID:	Q00445
Cytogenetics:	11p
Domains:	C2
Protein Families:	Secreted Protein, Transmembrane
MW:	42.9 kDa
Gene Summary:	Synaptotagmins, such as SYT5, are a family of type III membrane proteins characterized by cytoplasmic repeats related to protein kinase C (see MIM 176960) regulatory (C2) domains, which are thought to bind calcium. Synaptotagmins may act both as negative regulators of vesicle fusion, allowing fusion in the presence of calcium, and as calcium receptors or sensor molecules (summary by Hudson and Birnbaum, 1995 [PubMed 7597049]).[supplied by OMIM, Feb 2011]

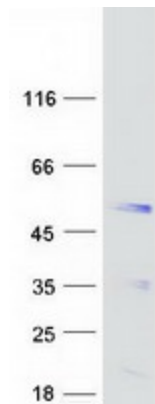
Product images:



Circular map for RC208528



Western blot validation of overexpression lysate (Cat# [LY418847]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC208528 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified SYT5 protein (Cat# [TP308528]). The protein was produced from HEK293T cells transfected with SYT5 cDNA clone (Cat# RC208528) using MegaTran 2.0 (Cat# [TT210002]).