

## Product datasheet for **RG238116**

### Synaptotagmin 1 (SYT1) (NM\_001291901) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Synaptotagmin 1 (SYT1) (NM_001291901) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Synaptotagmin 1
Synonyms:	BAGOS; P65; SVP65; SYT
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG238116 representing NM_001291901. Blue=ORF Red=Cloning site Green=Tag(s)

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GCTCGTTT TAGTGAACCGTCAGAATTTTGT AATACGACTCACTATAGGGCGCCGGGAATTCGTGCGACTG
GATCCGGTACCGAGGAGATCTGCCGCC GCGATCGCC
ATGGT GAGCGAGAGT CACCATGAGGCCCTGGCAGCCCGCCTGT CACCACTGTGCGGACTGTTCTGCCA
AGCAACGCCACAGAGCCAGCCAGTCTGGAGAAGGAAAGGAAGATGCATTTTCTAAGCTGAAGGAGAAG
TTTATGAATGAGTTGCATAAAATTCATTGCCACCGTGGGCTTAATTGCAATAGCCATAGTCGCAGTC
CTTTTAGTCTGACCTGCTGCTTTTGTATCTGTAAGAAATGTTTGTTCAAAAAGAAAAACAAGAAGAAG
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AAACTGGGAAACTTCAGTATTCAGTGGATTATGATTTCCAAAATAACCAGCTGCTGGTAGGGATCATT
CAGGCTGCCGAACCTGCCCGCCTTGACATGGGGGGCACATCTGATCCTTACGTGAAAGTGTTTCTGCTA
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TTTACTTTCAAGGTACCATACTCGGAATTTGGGTGGCAAAACCTAGTGATGGCTGTATATGATTTTGAT
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ATGGATGTGGGTGGCTTATCCGATCCTTATGTGAAGATTCTGATGCAGAATGGTAAGAGGCTGAAG
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CCTTTTGAACAAATCCAGAAAGTGCAGGTGGTGGTAACTGTTTTGGACTATGACAAGATTGGCAAGAAC
GATGCCATCGGCAAAGTCTTTGTGGGCTACAACAGCACCGGCGCGGAGCTGCGACACTGGTCAGACATG
CTGGCCAAACCCAGGCGACCTATTGCCAGTGGCACACCTGCAGGTAGAGGAGGAAGTTGATGCCATG
CTGGCCGTC AAGAAG
ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAAAC
```



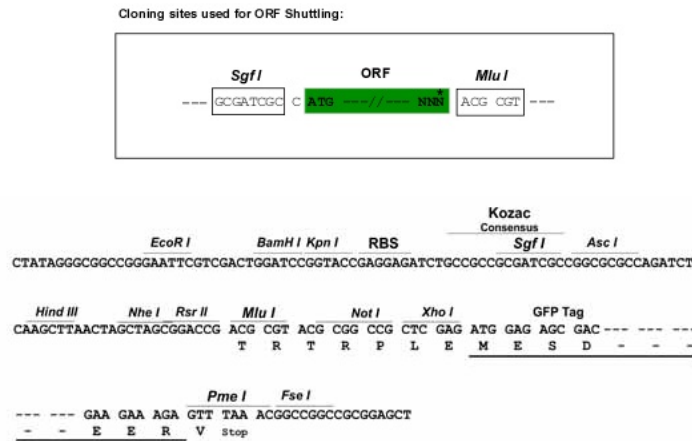
[View online »](#)

**Protein Sequence:** >Peptide sequence encoded by RG238116  
 Blue=ORF Red=Cloning site Green=Tag(s)

MVSESHHEALAAPPVTTVATVLPNATEPASPGEKEDAFSKLKEKFMNELHKIPLPPWALIAIAIVAV  
 LLVLTCCFCICKKCLFKKKNNKKKKEKGGKNAINMKDVKDLGKTMKDQDDAETGLTDGEEKEEPKEEE  
 KLGLKQYSLDYDFQNNQLLVGIIQAAELPALDMGGTSDPYVKVFLLPDKKKKFETKVHRKTLNPFVNEQ  
 FTFKVPYSELGGKTLVMAVYDFDRFSKHDIIIGFEFKVPMNTVDFGHVTEEWRDLQSAEKEEQEKLGDICF  
 SLRYVPTAGKLTVVILEAKNLKMKMDVGGGLSDPYVKIHLMQNGKRLKKKTTIKKNTLNPYYNESFSFEV  
 PFEQIQKVQVVVTVLDYDKIGKNDIAIGKVFVGYNSTGAELRHWSMLANPRRPIAQWHTLQVEEEVDAM  
 LAVKK  
 TRTRPLEMESDESGLPAMEIECRITGTLNGVEFELVGGGEGTPEQGRMTNKMSTKGALTFSPYLLSHV  
 MGYGFYHFGTYPSTYENPFLHAINNGGYNTRIEKYEDGGVLHVSFSYRYEAGRVIGDFKVMGTGFPED  
 SVIFTDKIIIRSNATVEHLHPMGDNDLDGSFTRTFLRDGGYSSVVDSHMHFKSAIHPSILQNGGPMFA  
 FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_001291901

**ORF Size:** 1257 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](#)

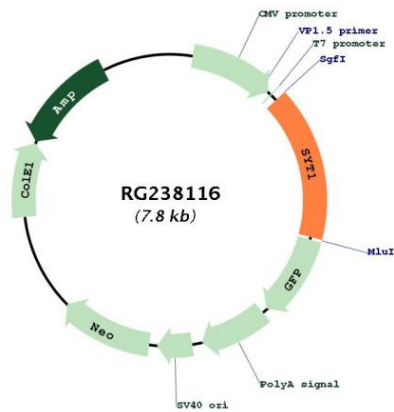
**OTI Annotation:** This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

**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).

**RefSeq:** [NM\\_001291901.2](#)

RefSeq Size:	4752 bp
RefSeq ORF:	1260 bp
Locus ID:	6857
Cytogenetics:	12q21.2
Protein Families:	Secreted Protein, Transmembrane
MW:	47.7 kDa
Gene Summary:	The synaptotagmins are integral membrane proteins of synaptic vesicles thought to serve as Ca(2+) sensors in the process of vesicular trafficking and exocytosis. Calcium binding to synaptotagmin-1 participates in triggering neurotransmitter release at the synapse (Fernandez-Chacon et al., 2001 [PubMed 11242035]).[supplied by OMIM, Jul 2010]

## Product images:



Circular map for RG238116