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Product datasheet for RG227105

Synaptotagmin 1 (SYT1) (NM_001135805) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Synaptotagmin 1 (SYT1) (NM_001135805) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	SYT1
Synonyms:	BAGOS; P65; SVP65; SYT
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence:

>RG227105 representing NM_001135805
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGTGAGCGAGAGTCACCATGAGGCCCTGGCAGCCCCGCCTGTCACCACTGTCGCGACTGTTCTGCCAA
GCAATGCCACAGAGCCAGCCAGTCCTGGAGAAGGAAAGGAAGATGCATTTTCTAAGCTGAAGGAGAAGTT
TATGAATGAGTTGCATAAAATTCCATTGCCACCGTGGGCCTTAATTGCAATAGCCATAGTCGCAGTCCTT
TTAGTCCTGACCTGCTGCTTTTGTATCTGTAAGAAATGTTTGTTCAAAAAGAAAAACAAGAAGAAGGGAA
AGGAAAAAGGAGGGAAGAATGCCATTAACATGAAAGATGTAAAAGACTTAGGGAAGACGATGAAAGATCA
GGCCCTCAAGGATGATGATGCTGAAACTGGATTGACAGATGGAGAAGAAAAAGAAGAACCCAAAGAAGAG
GAGAAACTGGGAAAACTTCAGTATTCACTGGATTATGATTTCCAAAATAACCAGCTGCTGGTAGGGATCA
TTCAGGCTGCCGAACTGCCCGCCTTGGACATGGGGGGCACATCTGATCCTTACGTGAAAGTGTTTCTGCT
ACCTGATAAGAAGAAGAAATTTGAGACAAAAGTCCACCGAAAAACCCTTAATCCTGTCTTCAATGAGCAA
TTTACTTTCAAGGTACCATACTCGGAATTGGGTGGCAAAACCCTAGTGATGGCTGTATATGATTTTGATC
GTTTCTCTAAGCATGACATCATTGGAGAATTTAAAGTCCCTATGAACACAGTGGATTTTGGCCATGTAAC
TGAGGAATGGCGTGACCTGCAAAGTGCTGAGAAGGAAGAGCAAGAGAAATTGGGTGATATCTGCTTCTCC
CTTCGCTACGTACCTACTGCTGGTAAGCTGACTGTTGTCATTCTGGAGGCAAAGAACCTGAAGAAGATGG
ATGTGGGTGGCTTATCCGATCCTTATGTGAAGATTCATCTGATGCAGAATGGTAAGAGGCTGAAGAAGAA
AAAGACAACAATTAAAAAGAACACACTTAACCCCTACTACAATGAGTCATTCAGCTTTGAAGTACCTTTT
GAACAAATCCAGAAAGTGCAGGTGGTGGTAACTGTTTTGGACTATGACAAGATTGGCAAGAACGATGCCA
TCGGCAAAGTCTTTGTGGGCTACAACAGCACCGGCGCGGAGCTGCGACACTGGTCAGACATGCTGGCCAA
CCCCAGGCGACCTATTGCCCAGTGGCACACCCTGCAGGTAGAGGAGGAAGTTGATGCCATGCTGGCCGTC
AAGAAG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

View online »

Protein Sequence:

>RG227105 representing NM_001135805
Red=Cloning site Green=Tags(s)

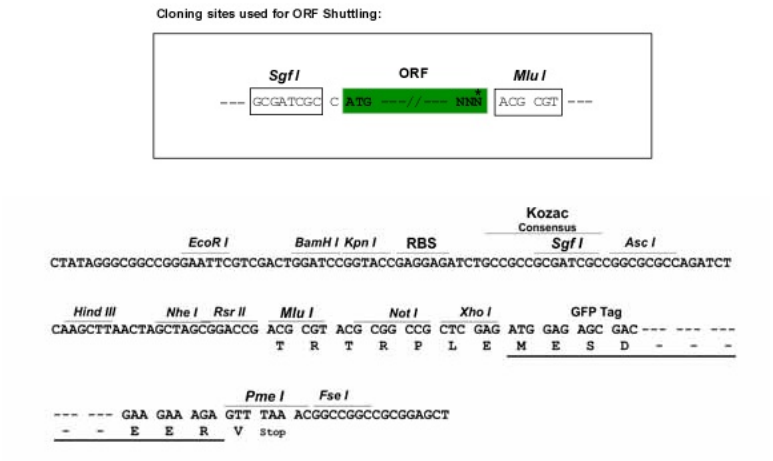
MVSESHHEALAAPPVTTVATVLPSNATEPASPGEGKEDAFSKLKEKFMNELHKIPLPPWALIAIAIVAVL
LVLTCCFCICKKCLFKKKNKKKGKEKGGKNAINMKDVKDLGKTMKDQALKDDDAETGLTDGEEKEEPKEE
EKLGKLQYSLDYDFQNNQLLVGIIQAAELPALDMGGTSDPYVKVFLLPDKKKKFETKVHRKTLNPVFNEQ
FTFKVPYSELGGKTLVMAVYDFDRFSKHDIIGEFKVPMNTVDFGHVTEEWRDLQSAEKEEQEKLGDICFS
LRYVPTAGKLTVVILEAKNLKKMDVGGLSDPYVKIHLMQNGKRLKKKKTTIKKNTLNPYYNESFSFEVPF
EQIQKVQVVVTVLDYDKIGKNDAIGKVFVGYNSTGAELRHWSDMLANPRRPIAQWHTLQVEEEVDAMLAV
KK

TRTRPLE - GFP Tag - V

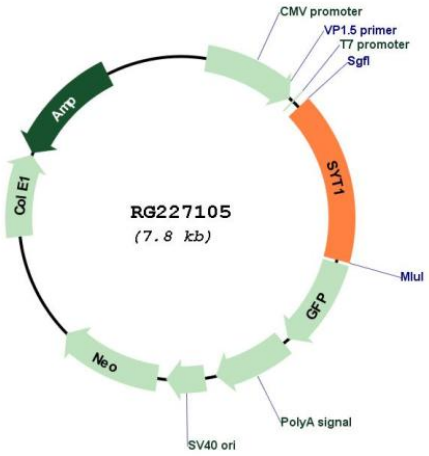
Restriction Sites:

SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN:

NM_001135805

ORF Size:	1266 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_001135805.1, NP_001129277.1
RefSeq Size:	4841 bp
RefSeq ORF:	1269 bp
Locus ID:	6857
UniProt ID:	P21579
Cytogenetics:	12q21.2
Protein Families:	Secreted Protein, Transmembrane
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]