

## Product datasheet for **RG226544**

### **SYT2 (NM\_001136504) Human Tagged ORF Clone**

#### Product data:

Product Type:	Expression Plasmids
Product Name:	SYT2 (NM_001136504) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	SYT2
Synonyms:	CMS7; MYSPC; SytII
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG226544 representing NM_001136504 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGAGGAACATTTTCAAGAGGAACCAGGAGCCTATTGTGGCTCCTGCCACCACCACCGCCACGATGCCCA  
TTGGACCCGTGGACAACCTCACTGAGAGTGGGGTGCTGGGGAGAGCCAGGAGGACATGTTTGCCAACT  
GAAGGAGAAGTTATTCAATGAGATAAACAAGATTCCCTTACCACCCTGGGCACTGATCGCCATTGCTGTG  
GTTGCTGGGCTCCTGCTTCTCACCTGCTGCTTCTGCATCTGCAAGAAATGCTGCTGCAAGAAGAAGAAGA  
ACAAGAAGGAGAAGGGCAAAGGCATGAAGAATGCCATGAACATGAAGGACATGAAAGGGGTCAGGATGA  
CGACGACGAGACAGGCCTGACTGAGGGGAAGGTGAAGGGGAGGAGGAGAAAGAGCCAGAGAACCTG  
GGCAAACCTGCAGTTTTCCCTGGACTATGATTTTTCAGGCTAATCAGCTTACTGTGGGCTTCTGCAGGCTG  
CTGAACTGCCCTGGACATGGGAGGCACCTCAGACCCTTATGTCAAGGTCTTCTCCTTCTGACAA  
GAAGAAGAAATATGAGACCAAAGTCCATCGGAAGACACTGAACCTGCCTTCAATGAAACCTTCACTTC  
AAGGTGCCATACCAGGAGCTTGGGGCAAACCTCTGGTATGGCCATCTATGACTTTGACCGCTTCTCCA  
AACATGACATCATTGGAGAGGTAAGGTGCCTATGAACACAGTGGACCTCGGCCAGCCATTGAGGAGTG  
GAGAGACCTGCAAGGCGGGGAAAAGGAGGAGCCGAGAAGCTGGCGACATCTGCACCTCCCTGCCAT  
GTGCCCACGGCCGGAAGCTCACTGTCTGCATCCTGGAGGCTAAGAACCTCAAGAAGATGGACGTGGGCG  
GCCTTTCAGACCCGTACGTGAAGATCCACCTGATGCAGAATGGCAAGAGGCTCAAGAAGAAGAAGACAAC  
CGTGAAGAAGAAGACCCTGAACCCATACTTCAACGAGTCTTTCAGCTTTGAGATCCCCTTCGAGCAGATT  
CAGAAAGTCCAGGTAGTGGTCACCGTGCTGGACTATGACAAGCTGGGCAAGAACGAAGCCATAGGCAAGA  
TCTTCGTGGCAGCAATGCCACGGGCACAGAGCTGCGGCACTGGTCCGACATGCTGGCAACCCCGGAG  
GCCATCGCCAGTGGCACTCGCTCAAGCCTGAGGAGGAGGTGGATGCACCTCTGGCAAGAACAAG

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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**Protein Sequence:** >RG226544 representing NM\_001136504  
 Red=Cloning site Green=Tags(s)

MRNIFKRNQEPVIVAPATTTATMPIGPVDNSTESGGAGESQEDMFAKLEKLFNEINKIPLPPWALIAIAV  
 VAGLLLLTCCFCICKKCCCKKKKKEKKGKGMKNAMNMDKMGQDDDDAETGLTEGEGEGEEKEPENL  
 GKLFQSLDYDFQANQLTVGVLQAAELPALDMGGTSDPYVKVFLLPDKKKKYETKVHRKTLNPAFNETFTF  
 KVPYQELGGKTLVMAIYDFDRFSKHDIIGEVKVPMTVDLGPPIEWRDLQGEKEEPEKLDICTSLRY  
 VPTAGKLTVCILEAKNLKMDVGLSDPYVKIHLMQNGKRLKKKTTVKKTLNPFNFESFSFEIPFEQI  
 QKVQVVVTVLDYDKLGKNEAIGKIFVGSNATGTELRHWSMLANPRRPIAQWHSCLKPEEVDALLGKNK

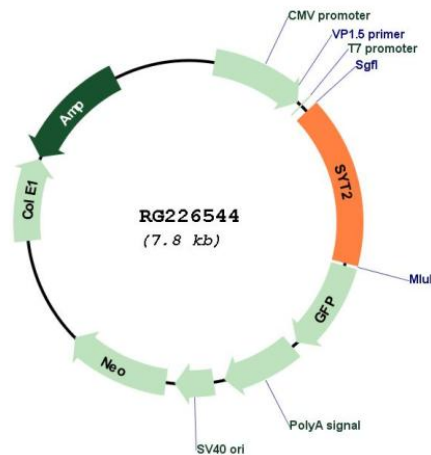
TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**Plasmid Map:**



**ACCN:** NM\_001136504

<b>ORF Size:</b>	1257 bp
<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_001136504.1</a> , <a href="#">NP_001129976.1</a>
<b>RefSeq Size:</b>	7614 bp
<b>RefSeq ORF:</b>	1260 bp
<b>Locus ID:</b>	127833
<b>UniProt ID:</b>	<a href="#">Q8N9I0</a>
<b>Cytogenetics:</b>	1q32.1
<b>Protein Families:</b>	Secreted Protein, Transmembrane
<b>Gene Summary:</b>	This gene encodes a synaptic vesicle membrane protein. The encoded protein is thought to function as a calcium sensor in vesicular trafficking and exocytosis. Mutations in this gene are associated with myasthenic syndrome, presynaptic, congenital, with or without motor neuropathy. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Oct 2014]