

Product datasheet for **RG207822**

SYT12 (NM_177963) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	TurboGFP
Symbol:	SYT12
Synonyms:	SYT11; sytXII
Mammalian Cell	Neomycin
Selection:	
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence: >RG207822 representing NM_177963
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCTGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCTGTGGATGTGGCAGAATACCATCTGAGCGTCATCAAGAGCCCCCTGGCTGGGAGGTGGGTGTCT
ATGCTGCAGGGGCCCTGGCCCTGCTGGGAATCGCAGCTGTGAGCCTGTGGAAGCTCTGGACGTCGGGGAG
CTTCCCCAGCCCCCTCTCCGTTCCCCAATTACGACTACAGGTACCTTCAGCAGAAGTACGGCGAGAGCTGC
GCAGAGGCCAGGGAGAAGAGAGTGCCTGCCTGGAATGCCAGCGGGCCAGCACGCGGGGACCAACCCAGCC
GCAAAGGCAGTCTCAGCATTGAGGACACCTTTGAGAGCATCAGTGAAGTGGGGCCTCTGGAGCTGATGGG
CCGGGAGTTGGACCTGGCCCCCTATGGGACCTCCGGAAGTCCAGTCGGCCGACTCCCTGAACTCCATC
TCCTCCGTGAGCAACACCTTTGGGCAGGACTTCACACTGGGCCAGGTGGAGGTGAGCATGGAGTACGACA
CTGCCTCCACACGCTGAACGTGGCGGTGATGCAGGGCAAGGACCTCCTGGAGCGGGAGGAGGCCAGCTT
CGAGTCCTGCTTCATGCGCGTCAGCCTGCTGCCGACGAGCAGATCGTGGGCATTTCTCGGATCCAGAGA
AATGCCTACTCCATCTTCTTTGATGAGAAGTTCTCCATCCCCCTGGATCCACAGCCCTGGAGGAGAAGA
GCCTGCGGTTTTCTGTATTGGCATCGATGAGGATGAGCGCAACGTGAGCAGCGGGGTGGTGGAGCTGAA
GCTTTCTGTGCTTGACCTCCCGCTGCAGCCCTTCAGTGGCTGGCTCTATTTACAGGACCAGAACAGGCC
GCCGATGCTGTGGGGAGATCCTGCTCTCCCTCAGCTACCTCCCCACAGCCGAGCGCCTCACCGTGGTCG
TGGTTAAGGCCAAGAACCTCATCTGGACCAACGACAAGACCACAGCGGACCCCTTCGTCAGGTGTACCT
GCTGCAGGATGGGAGGAAGATGAGCAAAAAGAAGACAGCCGTGAAGAGGGATGACCCCAACCCGGTGTTC
AACGAAGCCATGATCTTCTCGGTGCCAGCCATTGTGCTCCAGGACCTGTCTCTCCGCTGACGGTGGCTG
AGAGCAGCAGCGACGGCCGTGGGGACAACGTGGGCCATGTATCATTGGGCCGTGAGCCAGTGGCATGGG
AACCACACATTGAACAGATGTTGGCCACGCTGCGCAGGCCCGTGTCCATGTGGCACGCTGTCCGGCGA
AAC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



Protein Sequence:

>RG207822 representing NM_177963

Red=Cloning site Green=Tags(s)

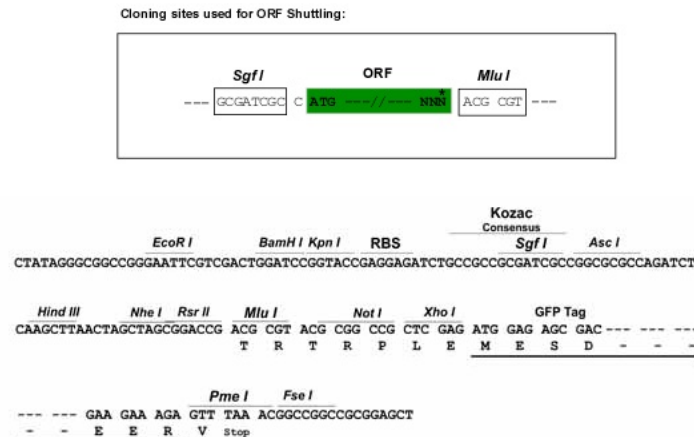
MAVDVAEYHLSVIKSPPGWEVGVYAAGALALLGIAAVSLWKLWTSFSPSPFPNYDYRYLQQKYGESCAEAREKRVPAWNAQRASTRGPPSRKGLSIEDTFESISELGPLELMGRELDLAPYGLRKSQSADSLNSISSVSNTFGQDFTLGQVEVSMEYDTASHTLNVAVMQGKDLLEREEASFESCFMRVSLLPDEQIVGISRIQRNAYSIFFDEKFSIPLDPTALEEKSLRFSVFGIDEDERNVSTGVVELKLSVLDLPLQPFSGWLYLQDQNKAADAVGEILLSLSYLPTAERLTVVVVKAKNLIWTNDKTTADPFVKVYLLQDGRKMSKKKTAVKRDDPNPVFNEAMIFSVPAIVLQDLSLRVTVAESSSDGRGDNVGHVIGPSASGMGTTHTWNQMLATLRRPVSMWHAVRRN

TRTRPLE - GFP Tag - V

Restriction Sites:

SgfI-MluI

Cloning Scheme:



ACCN:

NM_177963

ORF Size:

1263 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:

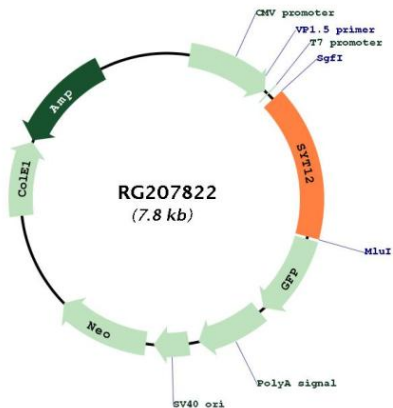
This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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:	<u>NM_177963.4</u>
RefSeq Size:	3520 bp
RefSeq ORF:	1266 bp
Locus ID:	91683
UniProt ID:	<u>Q8IV01</u>
Cytogenetics:	11q13.2
Protein Families:	Secreted Protein, Transmembrane
Gene Summary:	This gene is a member of the synaptotagmin gene family and encodes a protein similar to other family members that mediate calcium-dependent regulation of membrane trafficking in synaptic transmission. Studies of the orthologous gene in rat have shown that the encoded protein selectively modulates spontaneous synaptic-vesicle exocytosis and may also be involved in regulating calcium independent secretion in nonneuronal cells. Alternative splicing results in multiple transcript variants. The gene has previously been referred to as synaptotagmin XI but has been renamed synaptotagmin XII to be standard with mouse and rat official nomenclature.[provided by RefSeq, Apr 2010]

Product images:



Circular map for RG207822