

Product datasheet for **RG214219**

SYT8 (NM_138567) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	TurboGFP
Symbol:	SYT8
Mammalian Cell	Neomycin
Selection:	
Vector:	pCMV6-AC-GFP (PSI00010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence: >RG214219 representing NM_138567
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGCATCGC**

ATGCTCCACCTGCATGGCTGGCAAACCATGCAGGGTAGAAAGATGGGGCACCCACCACTCTCTCCAGTG
CCCCGGCCCCAGCTGGCACCACAGCTATACCTGGGCTTATTCCAGACCTTGTGCGCGGGACCCCTGGCC
CCGCTGGGCTCTCATTGCCGGCGCCCTTGCCGCGGGCGTCTCTCGTCTCTGCTCTCTGTGCTGCC
TGCTGTCTGTGCCGCCACAGGAAGAAGCCAGGGACAAGGAGTCCGTGGGTCTGGGCAGTGCCCGCG
GCACCACCACCACCACCTGGTGCAACCTGATGTGGATGGCCTGGAGTCCAGCCCGGGGGATGCTCAGCA
ATGGGGGCGCCTGCAGCTCTCCCTGGAGTTCGACTTTGGAAGCCAGGAGATCAGGGTGGCCTGAGGCAG
GCAGCCGACCTGAGGCCTGGGGGCACCGTGGACCCCTATGCCCGGGTCAGCGTCTCCACCCAGGCCGGAC
ACAGACATGAGACAAAAGTGACCCGAGGCACGCTCTGCCCCGTGTTTGACGAGACCTGCTGTTCCACAT
CCCGCAGGCGGAGCTGCCAGGGGCCACCCTGCAGGTGCAGCTTTTCAACTTCAAGCGCTTCTCGGGCAT
GAGCCCTGGGTGAGTCCGTCTGCCACTGGGCACCGTGGATCTGCAGCATGTTCTGGAGCACTGGTACC
TGCTGGGCCCGCCGGCTGCCACTCAGCCCGAGCAGGTGCGGGAGCTGTGCTTCTCTCCGGTACGTGCC
CAGCTCAGGCCGGCTGACCGTGGTGGTCTGGAGGCTCGAGGCCTGCGTCCAGGACTTGCAGAGCCCTAC
GTGAAGGTCCAGCTCATGCTGAACCAGAGGAAGTGAAGAAGAGAAAGACGCCACCAAAAGGGCACGG
CGGCCCTTACTTCAATGAGGCCTTACCTTCTGGTGCCCTTACGCCAGGTCCAGAATGTGGACCTGGT
GCTGGCTGTCTGGGACCGCAGCCTGCCGCTCCGAAGTGAAGCCGTAGGCAAGGTGCACCTGGGTGCCCGG
GCCTCGGGGCAGCCCTGCAGCACTGGGCAGACATGCTGGCCACGCCCGCGGCCATTGCCAGCGGC
ACCCCTGCGGCCAGCCAGGGAGGTGGACCGCATGCTGGCCCTGCAGCCCGCCTTCGCCTGCGCCTGCC
CTTGCCCCACTCC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



Protein Sequence: >RG214219 representing NM_138567
Red=Cloning site Green=Tags(s)

MLHLHGWTMQGRKMGPVSPSAPAPAGTTAIPGLIPDLVAGTPWPRWALIAGALAAAGVLLVSCLLCAA
CCCCRRHRKKPRDKESVGLGSARGTTTTHLVQPDVDGLESPGDAQWGRQLQLSLEDFGSGEIRVGLRQ
AADLRPGGTVDPYARVSVSTQAGHRHETKVHRGTLCPVFDETCFHIPQAEPLGATLQVQLFNFKRFSGH
EPLGELRLPLGTVDLQHVLEHWYLLGPPAATQPEQVGELCFSLRYVPSSGRLTVVLEARGLRPGLAEPY
VKVQLMLNQKWKKRKTATKKGTAAPYFNEAFTFLVPFSQVQNVDLVLAVWDRSLPLRTEPVGKVHLGAR
ASGQPLQHWADMLAHARRPIAQRHPLRPAREVDRMLALQPRRLRLPLPHS

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_138567

ORF Size: 1203 bp

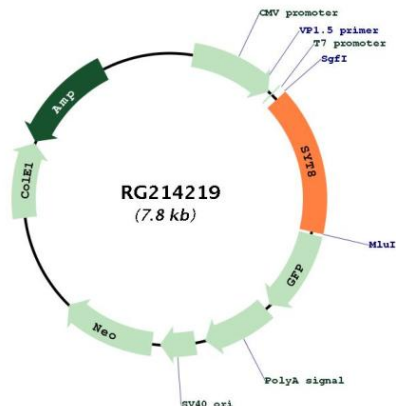
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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_138567.4, NP_612634.3</u>
RefSeq Size:	1423 bp
RefSeq ORF:	1206 bp
Locus ID:	90019
UniProt ID:	<u>Q8NBV8</u>
Cytogenetics:	11p15.5
Protein Families:	Transmembrane
Gene Summary:	This gene encodes a member of the synaptotagmin protein family. Synaptotagmins are membrane proteins that are important in neurotransmission and hormone secretion, both of which involve regulated exocytosis. Expression of the encoded protein in human pancreatic islets has been connected to activity of the promoter for the insulin gene, on the same chromosome several hundred kilobases away (PMID: 21336277 and 22928559). This association would link response to glucose to insulin secretion. Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Mar 2014]

Product images:



Circular map for RG214219