

Product datasheet for **MG211252**

Snx14 (NM_172926) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Snx14 (NM_172926) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Snx14
Synonyms:	B830022K16; C330035N22Rik; YR-14
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>MG211252 representing NM_172926
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGTGGCTCCGCCCGGGGTTGGGGTGCCTCCGCCTCTGCCTCTGAGGGCGGCACGTCTCCCTG
 CGTGACTGAGATGGGGTCTGGGTGCGGACGATCTGCGGGAGGCTGAAGCAGCGGCTGCGGCTGGACGT
 GGGGCGGAGATTTGCCGTGAGTATCCGCTGTTCTGCTTCTGCTGCTCTGCCTCAGCGTCGCTCGCTG
 CTCCTCAACAGGTATCTGCATGTCTTAATGATCTTCTGGTCTGTTGTTGCTGGAGTTGTGACATTCTACT
 GTTCATTAGGACCGATTCCCTCTTACCAATATATTCTTCACAATAAAATACAAACCAAGCAATTAGG
 ACTTCAAGAGTTATTTCCGCAAGGACATAGCTGTGCTGTTTGGTAAAGTAAAGTAAACGGCATAGG
 CCTTCTTGCTCCTTGAAGTATCAGCCCTGGCTAGACCTGAAAGTTTCTTGAAGGTAGATGCATCTC
 TCTCAGAGTTCTTGAATTAGTGTGGAAAACCTTGTCTATCCATGGTACAGGGATGTGACGGATGATGA
 GTCCTTTGTTGATGAGCTGAGGATCACCTTACGGTTTTTGCATCTGCTTGGTGGGAAGAAATCACAAG
 GTGGATATTCCATCTATTATAACCAAGAACTATTAAGCAGCAATGAAACATATAGAAGTGATTGTTA
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 TCATGTGGCCCTGAGAAGTGAAGAGATGAATTACAGTATTTAAGGAAGCTTACTGAGTTACTTTTTCT
 TATATTTTGCCTCCTAAAGCAACAGACTGCAGGTCCTGACATTACTCATAAGAGAGATTCTGTCTGGTT
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 GTCTATAGAAGATATCTTGAATCTATGTTCTTGAATCAAACCTAACAGAATTTTCATGGCACATTTCTG
 ATGCTCAGCTTCCATCCAAAAGGATCATTTGGCCCCAAAACCTATGAGTTTTTGAAGTGAAGAGAGAGGA
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 AGTAGTTTTTCAAGTCCCAGACTGGCTTCATCTTCTAATGGGAACTCGAATCCTCTTTAAGAACC
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 GAAGAAACCAAGTACGAAAGCATCAGACTCCTGTTTGTGGCCTGCAGCAGCCAGTGCTCAACAAGCAGC
 TGACCTATGTGTTGCTGGACATTGTGATACAGGAGCTGTTTCCAGAGCTAAATAAGGTACAAAAGGAAGC
 TACCTCCATGACATCCTGGATG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG211252 representing NM_172926
 Red=Cloning site Green=Tags(s)

MWLRRRGLGVPSASASEGGTSSPAWTEMGSWVRTICGRLKQRLRLDVGREICRQYPLFCFLLLCLSVASL
 LLNRYLHVLMIWFSFVAGVVTFYCSLGPDSL LPNIFFTIKYKPKQLGLQELFPQGHSCAVCGKVKCKRHR
 PSLLLENYQPWLDLKVSSKVDASLSEVLELVLENFVYPWYRDVTDDES FVDELRLITLRFASVLRRIHK
 VDIPSIITKLLKAAMKHIEVIVKARQKVKNTEYLQQAAL EYGP E L HVALRSRDELQYL RKL TELLFP
 YILPPKATDCRSLTLLIREILSGSVLLPSLDFLADPDTVNHLLIIFIDDSPPEKATEPASPLVPFLQKFA
 EPRNKKPSVLKLELKQIREQQDLLFRFMNFKQEGAVHVLQFCLTVEEFNDRILRPELSNDEMLSLHEEL
 QKIYKTYCLDESIDKIRFDPFIVEEQRIAEOPYIDVVKLQTMRCLFEAYEHVLSLENVFTPMFCHSDE
 YFRQLLRGAESPTRNSKFNSTQKRGESFGISRIGSKIKGVFKSTTMEGAVLPNYGVAEGEDDFIEEGIV
 VMEDDSPVEAVSTPNTPRNLAAWKISIPYVDFEDPSSERKEKKERIPVFCIDVERNDRRAVGHEPEHWS
 VYRRYLEFYVLESKLETFHGTFPDAQLPSKRIIGPKNYEFLKSKREEFQEY LQKL VQHP ELSNSQLLADF
 LSPNGGETQFLDKILPDVNLGKI IKSVPGLMKEKGQHLEPFIMSFINSCE SPKPKPSRPELTILSPTSE
 NNKCLFNDLFKNANRAENTERKQONQYFMEVMTVDGVYDYL MYVGRVVFQVPDWLHLLMGTRILFKNT
 LEMYTDYYLQCKLEQLFQEHRLVSLITLLRDAIFCENTEPRSLQDKQKGAQT FEEMMNYIPDLIVKICIG
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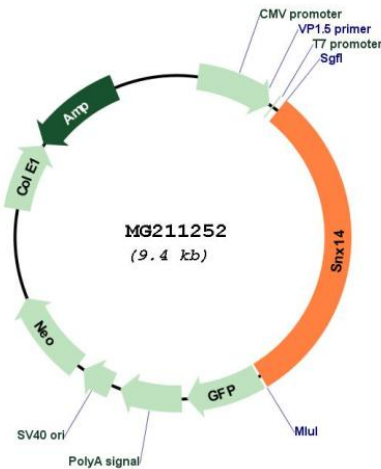
TRTRPLE - GFP Tag - V

Restriction Sites:

SgfI-MluI

Cloning Scheme:



Plasmid Map:


ACCN: NM_172926

ORF Size: 2892 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_172926.3](#), [NP_766514.2](#)

RefSeq Size: 3112 bp

RefSeq ORF: 2895 bp

Locus ID: 244962

UniProt ID: [Q8BHY8](#)

Cytogenetics: 9 E3.1

Gene Summary: Plays a role in maintaining normal neuronal excitability and synaptic transmission. May be involved in several stages of intracellular trafficking (PubMed:24859318). Required for autophagosome clearance, possibly by mediating the fusion of lysosomes with autophagosomes. Binds phosphatidylinositol 3,5-bisphosphate (PtdIns(3,5)P₂), a key component of late endosomes/lysosomes. Does not bind phosphatidylinositol 3-phosphate (PtdIns(3P)) (By similarity).[UniProtKB/Swiss-Prot Function]