

## Product datasheet for **MG209977**

### Syn1 (NM\_013680) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Syn1 (NM_013680) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Syn1
Synonyms:	Syn-1; Syn1-S
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>MG209977 representing NM\_013680  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGAACACTCGCGCGCCGCTGTCTCGGACAGCAACTTCATGGCCAATCTGCCGAATGGGTACATGACAG  
 ACCTGCAGCGCCCGCAACCGCCCCGCCCTCCCTCGGCCGCCAGCCCTGGGGCCACGCCCGGCTCCGC  
 GACAGCCTCTGCCGAGAGGGCCTCCACAGCTGCTCCAGTGGCTTCTCCAGCAGCCCTAGTCTGGGTCC  
 TCGGGGGCGCGGCTTCTTCTCGTCGCTGTCTAACCGGGTCAAGCAAACACAGCAGCCGAGCCGCCA  
 CCTTCAGCGAGCAGGTGGCGGTGGCTCTGGGGCGCAGGCCGCGGGGGCGCCGCCAGGGTGTCTGT  
 GGTTCATCGACGAACCGCACACCGACTGGGCAAAATACTTCAAAGGGAAGAAGATCCATGGAGAAATTGAC  
 ATTAAGTAGAGCAAGCTGAATTCTCTGATCTCAATCTTGTGGCTCATGCCAATGGTGGATTCTCTGTGG  
 ACATGGAAGTTCTTCGGAATGGAGTCAAAGTTGTGAGGTCTCTGAAGCCAGACTTTGTGCTGATCCGCCA  
 GCATGCCCTTCAGCATGGCAGTAATGGAGACTACCGAAGTTTGGTCATTGGGCTGCAGTATGCTGGAATC  
 CCCAGTGTAAACTCTTTGCATTCTGTCTACAACCTCTGTGACAAACCCTGGGTGTTTGCCAGATGGTTC  
 GACTACACAAGAAGCTTGAACAGAGGAATCCCTCTGATTGATCAGACTTTCTATCCTAATCACAAGA  
 GATGCTCAGCAGCACAACATACCCTGTGGTGTGAAGTGGGCCACGCACATTCTGGGATGGGCAAGGTC  
 AAGGTAGACAACCAACATGACTTCCAGGATATTGCAAGTGTGTGGCACTGACTAAGACATATGCCACTG  
 CTGAGCCCTTCATTGATGCTAAATATGATGTGCGTGTCCAGAAGATTGGGCAGAACTACAAGGCCTACAT  
 GAGGACATCAGTGTGGGTAACGGAAGACCAATACAGGTTCTGCTATGCTTGAGCAGATTGCCATGTCT  
 GACAGGTACAAGTTGTGGGTAGACACGTCTCAGAGATTTTGGGGACTTGACATCTGCCAGTGAAG  
 CGCTGCATGGCAAGGACGGAAGGATCACATTATTGAGTGGTGGGCTCCTCCATGCCACTCATTGGTGA  
 TACCAGGATGAAGACAAGCAGCTCATCGTGAACCTTGTGGTCAACAAGATGACTCAGGCTCTGCCTCGG  
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 TGGGCCGACAGCCTCCCAGCAGCTGCAGGTCCTCTGCTCAACAACGACCCCCACCCAGGGAGGCC  
 TCCACAGCCAGGCCAGGACCTCAGCGCCAGGGACCCCGCTGCAGCAGCGCCACCCCAAGGCCAG  
 CAACATCTTTCTGGCCTTGGACCGCCAGCTGGCAGCCCTCTGCCTCAGCGCCTACCAAGTCCCACCGCAG  
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 AGGAGGCCCTGGAGCACCTCCAGCAGCGCGCCACCAGCCTCCCATCTCCACAGCGTCAGGCGGGGGCC  
 CCGCAGGCTACCCGTGAGCATCTATCTCTGGTCCCCTCGTCAGGCCAGTCAGGCAGTCCCGGACCTC  
 GACTGGGCTCCACCACACAGCAGCCCCGGCCAGCGGCCAGGTCTGCTGGACGTCCCGCCAAACC  
 ACAGCTGGCCAGAAACCCAGCCAGGATGTGCCACCACCCATCACCGCCGCTGCCGGGGACCCCGCAC  
 CCCAGCTCAACAAATCCAGTCTCTGACCAATGCCTTCAACCTTCCAGAGCCAGCCCTCCCAGGCCCA  
 GCCTTAGCCAGGACGAGGTGAAAGCTGAGACCATCCGACGCTGAGGAAGTCTTTCGCCAGCCTCTTCTC  
 CGAC

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG209977 representing NM\_013680  
 Red=Cloning site Green=Tags(s)

MNYLRRRLSDSNFMANLPNGYMTDLQRPQPPPPPSAASPGATPGSATASAERASTAAPVASPAAPSPGS  
 SGGGGFFSSLNAVKQTAAAAATFSEQVGGSGGAGRGGAAARVLLVIDEPHTDWAKYFKGKKIHGEID  
 IKVEQAEFSDLNLVAHANGGFSDMEVLRNGVKVVRSLKPDFVLIRQHAFSMARNGDYRSLVIGLQYAGI  
 PSVNSLHSVYVNFCDKPWFVAQMVRLHKKLGTEEFPLIDQTFYPNHKEMLSSTTYPVVVKMGHAHSGMGKV  
 KVDNQHDFQDIASVVALTKTYATAEPFIDAKYDVRVQKIGQNYKAYMRTSVSGNWKNTGSALEQIAMS  
 DRYKLWVDTCEIFGGLDICAVALHGDGRDHIIEVVGSSMPLIGDHQDEKQLIVELVVKMTQALPR  
 QPQRDASPGRGSHSQSSSPGALTLGRQTSQQPAGPPAQQRPPQGGPPQPGPGPQRQGPPLQQRPPPPQGQ  
 QHLSGLGPPAGSPLPQRLPSPATAAPQSSASQATPVTQGGQRQSRPVAGGPGAPPAARPPASPSPQRQAGA  
 PQATRQASISGPTRQASQAGPGPRTGPPTTQQRPSGPGPAGRPAPQLAQKPSQDVPPPITAAAGGPPH  
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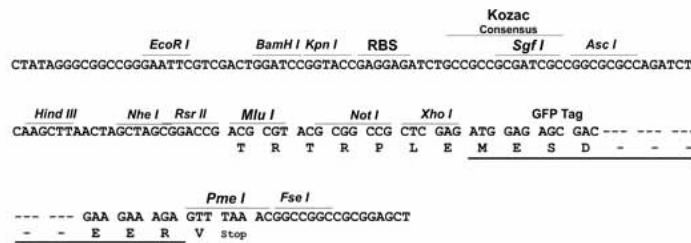
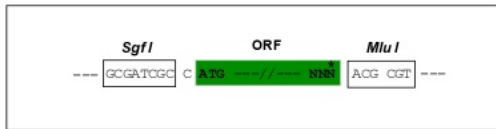
TRTRPLE - GFP Tag - V

Restriction Sites:

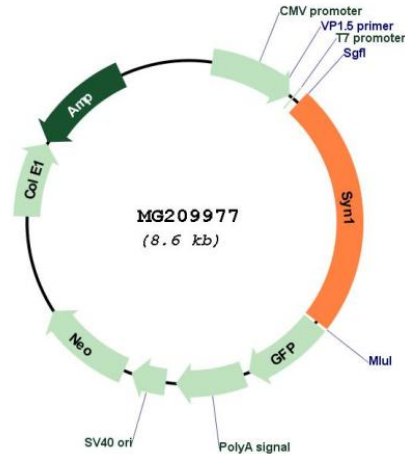
SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



## Plasmid Map:



ACCN: NM\_013680

ORF Size: 2034 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\\_013680.3](#), [NP\\_038708.2](#)

RefSeq Size: 3143 bp

RefSeq ORF: 2121 bp

Locus ID: 20964

UniProt ID: [O88935](#)

Cytogenetics: X 16.37 cM

**Gene Summary:** Neuronal phosphoprotein that coats synaptic vesicles, binds to the cytoskeleton, and is believed to function in the regulation of neurotransmitter release. Regulation of neurotransmitter release. The complex formed with NOS1 and CAPON proteins is necessary for specific nitric-oxide functions at a presynaptic level.[UniProtKB/Swiss-Prot Function]