

Product datasheet for **MG215697**

Shank2 (NM_001113373) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Shank2 (NM_001113373) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Shank2
Synonyms:	mKIAA1022; ProSAP1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG215697 representing NM_001113373 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGAAGTCTTTGTTAAATGCCTTACCAAGAAGGAAGTGCCTTCAGAGAGGCCCCAGCTTATTCCAACC
GCAGGGCGGCCCCCAACACATTGGCTGCCCCAGAGTTCTTCTGCGTTCTAATAGTGACAACAACCT
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CCAATGCTGAAGTTCACCCGAAGCTTGTCCATGCCAGACACTTCTGAGGACATCCCCCTCCGCCACAGT
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CTTGATAGATCTTGGGTGACTCGAGTTGGGCATAGGATGAACATAGAAAGGGCTTTGAAACAGCTGCTG
GACAGA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG215697 representing NM_001113373
 Red=Cloning site Green=Tags(s)

MKSLLNFAFTKKEVPFREAPAYSNNRRRPPNLAAPRVLLRSNSDNNLNAGAPEWAVCSAATSHRSLSPQL
 LQQTSPKPDGATKSLGSYTPGPRSRSPSLNRLGGTAEDGKRTQPHWHVGSPTPGANKDSLSTFEYGPGR
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 SQAETRADRSKLFRHYTVGSYDSFDAASDCIIEDKTVVLQKKNEDGFGFVLRGAKADTPIEEFPTPAF
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 AAIAGAVRDREKREARRNSPAFLSTDLDGEDVGLGPPAPRMQASKFPEEGGFGEDETEQPLLPFGAA
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 VKPGGLELPGAKSANLAPRSPEVMSTVSGTRSTTVTFVTRPGTSQPIITLQSRPPDYESRTSGPRRAPS
 PVTSPTELSKEILPTPPPPSATAAASPSTLSDVFLPSQSPAGDLFGLNPAGRSRSPSPSILQQPISNKP
 FTTKPVHLWTKPDVADWLESLNLGEHKETFMDSIDGSHLPNLQKEDLIDLGVTRVGRHMNIERALKQLL
 DR

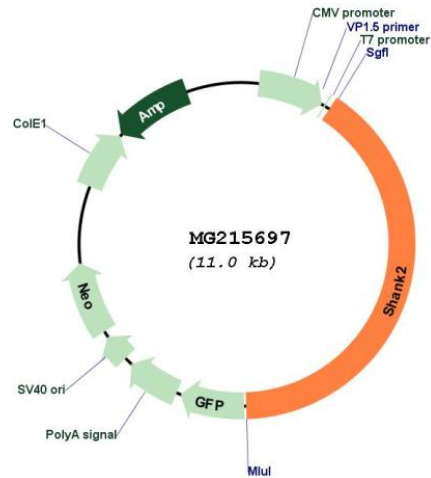
TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:


ACCN: NM_001113373

ORF Size: 4416 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_001113373.2](#), [NP_001106844.2](#)

RefSeq Size: 6359 bp

RefSeq ORF: 4419 bp

Locus ID: 210274

UniProt ID: [Q80Z38](#)

Cytogenetics: 7 F5

Gene Summary: Seems to be an adapter protein in the postsynaptic density (PSD) of excitatory synapses that interconnects receptors of the postsynaptic membrane including NMDA-type and metabotropic glutamate receptors, and the actin-based cytoskeleton. May play a role in the structural and functional organization of the dendritic spine and synaptic junction (By similarity).[UniProtKB/Swiss-Prot Function]