

Product datasheet for **MR225987**

Shtn1 (NM_175172) Mouse Tagged ORF Clone

Product data:

| | |
|---------------------------|--|
| Product Type: | Expression Plasmids |
| Product Name: | Shtn1 (NM_175172) Mouse Tagged ORF Clone |
| Tag: | Myc-DDK |
| Symbol: | Shtn1 |
| Synonyms: | 4930506M07Rik; Kiaa1598; mKIAA1598; Shootin1 |
| Mammalian Cell Selection: | Neomycin |
| Vector: | pCMV6-Entry (PS100001) |
| E. coli Selection: | Kanamycin (25 ug/mL) |



[View online »](#)

ORF Nucleotide Sequence:

>MR225987 representing NM_175172
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGAACAGCTCGGACGAGGAGAAGCAGCTGCAGCTCATCACCAGCTTGAAGGAGCAAGCCATTGGCGAAT
 ATGAAGACCTTCGAGCAGAGAACCAGAAAAACAAAGGAGAAGTGTGACAAAATTAGGCAAGAACGAGATGA
 AGCTGTTAAAAAACTGGAAGAGTTTCAGAAAAATTCACATATGGTTATAGAGGAGGTGAATTTTCATGCAG
 AACCATCTTGAAATAGAGAAGACATGTCGAGAGAGCGCTGAAGCCTTGGCGACAAAGCTAAATAAAGAAA
 ATAAAACACTGAAAAGAATCAGCATGCTATACATGGCCAAACTGGGGCCAGACGTAATTACAGAGGAGAT
 AAACATTGATGATGATGACCCAGCCACCGACACAGATGCTGCGGCTGAGACCTGTGTGTCTGTTCAGTGT
 CAGAAGCAAATCAAAGAAGCTTCGAGATCAAATTTGTGTCTGTTAGGAAGAAAAGAAGGTGTAGCCATCG
 AGCTGGAAAACCTCAAGAGCAAACCTCGGGGAGGTGATGGAGGAGTAAATAAAGTTAAGCAAGAAAAAGC
 TGTTTTAAATTCAGAAGTCTTTCGAGAGGAAAGTCTTAGAAAAATGCAACAGAGTGTCCATGTTGGCT
 GTTGAAGAGTATGAGAACTGCAAGTGAACCTGGAAGTGGAGAAGGACCTTCGCAAGAAAAGCAGAGTCTT
 TTGCACAAGAGATGTTTCATTGAACAAAAACAACTGAAGAGACAAAAGCCACCTTCTGCTGCAGAGCTCCCT
 TCCTGACCAGCAGCTTTTGAAGCTTTAGACGAAAACGCAAACTTATCCAGCAGCTTGAAGAAGAGAGG
 ATCCAGCATCAGAAAAAGGTCAAAGAGCTGGAGGAGCGGCTGGAGAATGAAGCACTTACAAAAGAGATCC
 ATAACTCAGACAACAGCTGGAGCTTCTGGAAGACGACAAGAGGGAGCTAGAGCAGAAAATACCAGAGCTC
 GGAGGAGAAGGCCCGAACCTGAAGCATTCACTGGATGAACCTCAGAAGCGAGTGAACAGTCTGAGAAT
 TCGGTACCTCCCCGCCCTCCTCCTCCACCTCTCCCCCTCCACCTCCAATCCAATCCGGTCCCTCA
 TGTCATGATCCGGAAGCGATCTCACCCAGTGGCAATAGTGTAAAGAAAAGAAAGACAACCTCAGCCAGA
 GACAGCTGAGGAAGTACAGACCTGAAGAGGCAAGCAGTGGAAAGAGATGATGGACAGAATTAAGAAGGGA
 GTTCATCTTAGACCGTTAACCAGACAGCCAGACCCAAGGCAAGCCAGACTCTCTCAAGGGCTCAGAAA
 GTGCGGTGGATGAGCTGAAGGGAATCCTGGCCTCCAG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR225987 representing NM_175172
 Red=Cloning site Green=Tags(s)

MNSSDEEKQLQLITSLKEQAIGEYEDLRAENQKTEKCDKIRQERDEAVKKLEEFQKISHMVIEEVNFMQ
 NHLEIEKTCRESAEALATKLNKENKTLKRISMLYMAKLGPDVITEEINIDDDDPATDAAAETCVSVQC
 QKQIKELRDQIVSVQEEKKVLAIENLKSGLGEVMEEVNKVKQEKAVLNSEVLEQRKVLEKCNRVSMIA
 VEEYEELQVNLLEKDLRKKAEFSAQEMFIEQNKLRQSHLLLQSSLPDQQLLKALDENAKLIQQLEEER
 IQHQKVKLEERLENEALHKEIHNLRQLELLEDDKRELEQKYSSEEKARNLKHSVDELQKRVNQSSEN
 SVPPPPPPPPPLPPPPNPPIRSLMSMIRKRSHPGNSAKKEKTTQPETAEEVTDLKRQAVEEMMDRIKKG
 VHLRPVNQTARPKAKPDSLKGSSEAVDELKILASQ

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

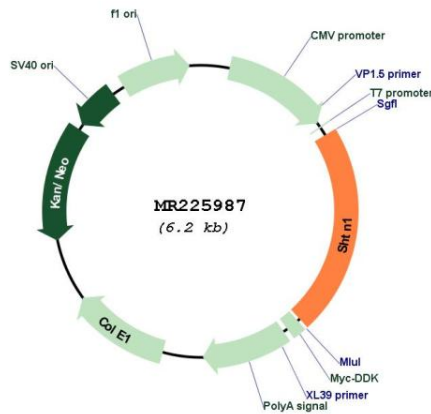
Sgfl-MluI

Cytogenetics: 19 D2- D3

MW: 53 kDa

Gene Summary: Involved in the generation of internal asymmetric signals required for neuronal polarization and neurite outgrowth (PubMed:23864681). Mediates netrin-1-induced F-actin-substrate coupling or 'clutch engagement' within the axon growth cone through activation of CDC42, RAC1 and PAK1-dependent signaling pathway, thereby converting the F-actin retrograde flow into traction forces, concomitantly with filopodium extension and axon outgrowth. Plays a role in cytoskeletal organization by regulating the subcellular localization of phosphoinositide 3-kinase (PI3K) activity at the axonal growth cone. Plays also a role in regenerative neurite outgrowth (By similarity). In the developing cortex, cooperates with KIF20B to promote both the transition from the multipolar to the bipolar stage and the radial migration of cortical neurons from the ventricular zone toward the superficial layer of the neocortex (PubMed:23864681). Involved in the accumulation of phosphatidylinositol 3,4,5-trisphosphate (PIP3) in the growth cone of primary hippocampal neurons (PubMed:23864681). [UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR225987