

Product datasheet for SC105196

SHTN1 (AK095703) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Tag:	Tag Free
Symbol:	SHTN1
Synonyms:	KIAA1598
Mammalian Cell	None
Selection:	
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)

Fully Sequenced ORF: >OriGene ORF within SC105196 sequence for AK095703 edited (data generated by NextGen Sequencing)

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ATGAACAGCTCGGACGAAGAGAAGCAGCTGCAGCTCATTACAGTCTGAAGGAGCAAGCA
ATAGGCGAATATGAAGACCTTAGAGCAGAGAACAGAAAAAAGGAGAGTGTGACAAA
ATTAGGCAAGAACGAGATGAAGCCGTTAAAAAAGTGAAGAAATTTAGAAAAATTTCTCAC
ATGGTCATAGAGGAAGTAAATTTATGCAGAACCATCTTGAAATAGAGAAGACTTGTGCGA
GAAAGTGCTGAAGCTTTGGCAACAAAGCTAAATAAGAAAAATAAACGTTGAAAAAGATC
AGCATGTTGTACATGGCCAAGCTGGGACCAGATGTAATAACTGAAGAGATAAACATTGAT
GATGAAGATTGCTACAGACACAGACGGTGCCGCCGAGACTTGTGTCTCAGTACAGTGT
CAGAAGCAAATTAAGAACTTCGAGATCAAATTTGTATCTGTTCCAGGAGGAAAAAGATT
TTAGCCATTGAGCTGGAAAAATCTCAAGAGCAAACTCGTAGAAGTAATTGAAGAAGTAAAT
AAAGTTAAACAAGAAAAGACTGTTTTAAATTCAGAAGTTCTTGAACAGAGAAAAAGTCTTA
GAAAAATGCAATAGAGTGTCCATGTTAGCTGTAGAAGAGTATGAGGAGATGCAAGTAAAC
CTGGAGCTGGAGAAGGACCTTCGAAAGAAAGCAGAGTCATTTGCACAAGAGATGTTTCATT
GAGCAAAACAAGCTAAAGAGACAAAGCCACCTTCTGCTGCAGAGCTCCATCCCTGATCAG
CAGCTTTTGAAGCTTTAGACGAAAATGCAAACTCACCCAGCAACTTGAAGAAGAGAGA
ATTCAGCATCAACAAAAGGTCAAAGAATTAGAAGAGCAACTAGAAAATGAAACACTCCAC
AAAGAAATACACAACCTCAAACAGCAACTGGAGCTTCTAGAGGAAGATAAAAGGAATTG
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CTCCAGAAAACGAGTGAACCACTGAGAAATTCAGTACCTCCACCACCTCCTCCTCCACCA
CCACTTCCCCCTCCACCTCCCAATCCTATCCGATCCCTCATGTCCATGATCCGAAACGA
TCCACCCCACTGGCAGTGGTGCTAAGAAAGAAAAGGCAACTCAACCAGAAACAAGTAA
GAAGTACAGATCTAAAGAGGCAAGCAGTTGAAGAGATGATGGATAGAATTAAGGGA
GTTTCATCTTAGACCGTTAATCAGACAGCCAGACCGAAGACAAAGCCAGAATCTTCGAAA
GGCTGCGAAAGTGAGTGGATGAATAAAGGAATACTGGCCTCCCACTAG
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Clone variation with respect to AK095703.1



5' Read Nucleotide
Sequence:

>OriGene 5' read for AK095703 unedited
 GTAAAGTCAAATTTGTAACGACTCACTATAGGCGGCCGCGNAATTCGCACGAGGCAGCC
 ACAGGCTGGCATAGCGGCTGCCGACCCGCCCTCGTTCTCCACCCCTGAACGGGACTGC
 TGGGCCCGCCCGCCCGCCTGCAGGTGAAGCGGCCGAGCCGCCGAGTAGGTGCGTGGG
 GATGATCTCACTCGCGCTCCGCGCCAGGAGGAGGAGCGGGAGCGGATCCAATTCTC
 CGGGTAGTGGAGCCGAAGCCACCGGCATCTTGCTTTTTCTCCCCCTCCTGTGTGC
 CCCGCGCCGCTCCTCTTTCCCTTTTATCCCGCCCCACCCGCCAAAATGAACAGCTCG
 GACGAAGAGAAGCAGCTGCAGCTCATTACAGTCTGAAGGAGCAAGCAATAGGCGAATAT
 GAAGACCTTAGAGCAGAGAACCAGAAAACAAAGGAGAAGTGTGACAAAATTAGGCAAGAA
 CGAGATGAAGCCGTTAAAAAAGTGAAGAAATTCAGAAAAATTCACATGGTCATAGAG
 GAAGTTAATTTTCATGCAGAACCATCTTGAATAGAGAAGACTTGTGAGAAAGTGTGAA
 GCTTTGGCAACAAAGCTAAATAAGAAAAATAAACGTTGAAAAGAATCAGCATGTTGTAC
 ATGGCCAAGCTGGGACCAGATGTAATAACTGAAGAGATAAACATTGATGATGAAGATTCTG
 ACTACAGACACAGACGGTGCCGCCGAGACTTGTGTCTCAGTACAGTGTGAGCAAGCAATT
 AAAGAATTTCGAGATCAAATTGTATCTGTTTCAGGAGGAAAAAGAAGATTTAGCCATTGAG
 CTGGAATAATCTCAGAGCAACTCGTAGAAGTATTGGAGAAGTAATNAAGTAAACAA

3' Read Nucleotide
Sequence:

>OriGene 3' read for AK095703 unedited
 ACTATGNNACCGCGCCCGCATTCTANGATCGAGTTTTTTTTTTTTTTTTTGGGAACT
 ATTTGGTGCCTTTTAATAAGTTGTGGTGAGGAGAGTTCAAATTACAGCATAACAGAATTC
 GTTTCGTGAATTAATGCAGTCTGTAGTAAGCATATCATATAGCAGTATTATCCAGTTAAA
 GAAAGATACAGTTGAAAAACATTACGTTTTAATCTCCATGAGTAAAGTGATAAGTAACT
 ATAAAAATCATTATTGGGAGAACATGGAAACAGTCAAGCATAACGAACCTTACAGAAAGATA
 ATTATCTCCAAATTTAGGAAGTACATGTACCTGCCTACCCACCTCTTCAAGCCTATGCTT
 ACCCACAGTGCAAAAAATACAATACAATACTACTGCAATTATTACTATCATTCTTTCTTT
 TGCCCTTAGGTGAAAAACACCTGACAGCTACATGCTGAGCCATGCTAACAAAATAAACCC
 TTCACTTTCTTTAATAGTAAAATTACCATTACTGAATCATTTGTACATAAAAGTGCATTTC
 AAGTACATTACCACTTATTTTAAATAAACCAATTTTGAAACAATCAACTTTGAAAAGC
 TGCATAAGTTTTTTTTTAAATCCCTGATTACATTCTATTTTATTCAGTGTGGTAGCCTGA
 AACATTGTATTTTATAGAGACTAACTACTGCTTAATTTCTTTTTTAAAAAAAACAACCCA
 ACCTGTGTAATATAGAACAGCAGTGAAGCAGGAAAAAGTGTGCTTGTACCTATCTTCAC
 CATACTGTACATAAGAACTCTGATNAAAAACGGGACCTGTGGCCANTAGTATTTGGGAA
 AACTAATTAACCTAGCCAGAGCCCATGGTTTACCAACCTACTACTGTAAAATTCAGG
 TTTGGGACTTTTACCCATTCTGTTTCAG

Restriction Sites:

NotI-NotI

ACCN:

AK095703

Insert Size:

3500 bp

OTI Disclaimer:

Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

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:	AK095703.1 , BAG53109.1
RefSeq Size:	3417 bp
RefSeq ORF:	3417 bp
Locus ID:	57698
Cytogenetics:	10q25.3
Gene Summary:	Involved in the generation of internal asymmetric signals required for neuronal polarization and neurite outgrowth. 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. 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. Involved in the accumulation of phosphatidylinositol 3,4,5-trisphosphate (PIP3) in the growth cone of primary hippocampal neurons.[UniProtKB/Swiss-Prot Function]