

Product datasheet for TP509611

OriGene Technologies, Inc.

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Shtn1 (NM_001114312) Mouse Recombinant Protein

Product data:

Product Type: Recombinant Proteins

Description: Purified recombinant protein of Mouse shootin 1 (Shtn1), with C-terminal MYC/DDK tag,

expressed in HEK293T cells, 20ug

Species: Mouse Expression Host: HEK293T

Expression cDNA Clone

or AA Sequence:

>MR209611 protein sequence
 Red=Cloning site Green=Tags(s)

C

TRTRPLEQKLISEEDLAANDILDYKDDDDK**V**

Tag: C-MYC/DDK

Predicted MW: 71.3 kDa

Concentration: >0.05 µg/µL as determined by microplate BCA method

Purity: > 80% as determined by SDS-PAGE and Coomassie blue staining

Buffer: 25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol

Note: For testing in cell culture applications, please filter before use. Note that you may experience

some loss of protein during the filtration process.

Storage: Store at -80°C after receiving vials.

Stability: Stable for 12 months from the date of receipt of the product under proper storage and

handling conditions. Avoid repeated freeze-thaw cycles.





Shtn1 (NM_001114312) Mouse Recombinant Protein - TP509611

RefSeq: NP 001107784

 Locus ID:
 71653

 UniProt ID:
 Q8K2Q9

 RefSeq Size:
 4081

Cytogenetics: 19 D2- D3

RefSeq ORF: 1896

Synonyms: 4930506M07Rik; Kiaa1598; mKIAA1598; Shootin1

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]