

Datasheet for ABIN7564637

## Shootin-1 (SHTN1) (AA 1-631) protein (His tag)



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### Overview

Quantity:	1 mg
Target:	Shootin-1 (SHTN1)
Protein Characteristics:	AA 1-631
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	His tag
Application:	Western Blotting (WB), SDS-PAGE (SDS)

### Product Details

Purpose:	Custom-made recombinat Shtn1 Protein expressed in mammalien cells.
Sequence:	<p>MNSSDEEKQL QLITSLKEQA IGEYEDLRAE NQKTEKCDK IRQERDEAVK KLEEFQKISH  MVIEEVNFMQ NHLEIEKTCR ESAEALATKL NKENKTLKRI SMLYMAKLGPDVITEEINID  DDDPATDTDA AAETCVSVQC QKQIKELRDQ IVSVQEEKKV LAIELENLKS KLGEVMEEVN  KVKQEKAVLN SEVLEQRKVL EKCNRVSMVA VEEYEELQVN LELEKDLRKK AESFAQEMFI  EQNKLKRQSH LLLQSSLPDQ QLLKALDENA KLIQQLEEEER IQHQKKVKEL EERLENEALH  KEIHNLRQQL ELLEDDKREL EQKYQSSEK ARNLKHSVDE LQKRVNQRSEN SVPPPPPPPP  PLPPPPPNPI RSLMSMIRKR SHPSGNSAKK EKTTPETAE EVTDLKRQAV EEMMDRIKKG  VHLRPVNQTA RPKAKPDSLK GSESAVDELK GILGTLNKST SSRSLKSLGP ENSETELERI  LRRRKLTAEA DSSSPTGILA TSESKSMPVL GSVSSVTKSA LNKKTLEAEF NNPCLTPEP  GEGPRKLEGC TNPKVTFQPP SKGGYRRKCV GSENAEPVW VLDPVSTHEP QTKDQAAEKD  PTQFEEEGGE TQPEYKEDSG GKTGETDSSN C <b>Sequence without tag. The proposed</b></p>

**Purification-Tag is based on experiences with the expression system, a different complexity of the protein could make another tag necessary. In case you have a special request, please contact us.**

### Characteristics:

#### Key Benefits:

- Made to order protein - from design to production - by highly experienced protein experts.
- Protein expressed in mammalian cells and purified in one-step affinity chromatography
- The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins.
- State-of-the-art algorithm used for plasmid design (Gene synthesis).

This protein is a made-to-order protein and will be made for the first time for your order. Our experts in the lab try to ensure that you receive soluble protein.

If you are not interested in a full length protein, please contact us for individual protein fragments.

The big advantage of ordering our made-to-order proteins in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified.

### Purity:

> 90 % as determined by Bis-Tris Page, Western Blot

### Grade:

custom-made

## Target Details

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### Target:

Shootin-1 (SHTN1)

### Alternative Name:

Shtn1 ([SHTN1 Products](#))

### Background:

Shootin-1 (Shootin1),FUNCTION: 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. Also plays 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

## Target Details

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neocortex (PubMed:23864681). Involved in the accumulation of phosphatidylinositol 3,4,5-trisphosphate (PIP3) in the growth cone of primary hippocampal neurons (PubMed:23864681). {ECO:0000250|UniProtKB:A0MZ67, ECO:0000269|PubMed:23864681}.

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Molecular Weight: 71.3 kDa

UniProt: [Q8K2Q9](#)

## Application Details

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Application Notes: In addition to the applications listed above we expect the protein to work for functional studies as well. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.

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Restrictions: For Research Use only

## Handling

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Format: Liquid

Buffer: The buffer composition is at the discretion of the manufacturer.

Handling Advice: Avoid repeated freeze-thaw cycles.

Storage: -80 °C

Storage Comment: Store at -80°C.

Expiry Date: 12 months