

Datasheet for ABIN7555679 **SYNPO2 Protein (AA 1-1093) (His tag)**



Overview

| Quantity: | 1 mg |
|-------------------------------|---|
| Target: | SYNP02 |
| Protein Characteristics: | AA 1-1093 |
| Origin: | Human |
| Source: | HEK-293 Cells |
| Protein Type: | Recombinant |
| Purification tag / Conjugate: | This SYNPO2 protein is labelled with His tag. |
| Application: | Western Blotting (WB), SDS-PAGE (SDS) |

| Product Details | |
|-----------------|---|
| Purpose: | Custom-made recombinat SYNPO2 Protein expressed in mammalien cells. |
| Sequence: | MGTGDFICIS MTGGAPWGFR LQGGKEQKQP LQVAKIRNQS KASGSGLCEG DEVVSINGNP |
| | CADLTYPEVI KLMESITDSL QMLIKRPSSG ISEALISENE NKNLEHLTHG GYVESTTLQI |
| | RPATKTQCTE FFLAPVKTEV PLAENQRSGP DCAGSLKEET GPSYQRAPQM PDSQRGRVAE |
| | ELILREKVEA VQPGPVVELQ LSLSQERHKG ASGPLVALPG AEKSKSPDPD PNLSHDRIVH |
| | INSIPTNEKA DPFLRSSKII QISSGRELRV IQESEAGDAG LPRVEVILDC SDRQKTEGCR |
| | LQAGKECVDS PVEGGQSEAP PSLVSFAVSS EGTEQGEDPR SEKDHSRPHK HRARHARLRR |
| | SESLSEKQVK EAKSKCKSIA LLLTDAPNPN SKGVLMFKKR RRRARKYTLV SYGTGELERE |
| | ADEEEEGDKE DTCEVAFLGA SESEVDEELL SDVDDNTQVV NFDWDSGLVD IEKKLNRGDK |
| | MEMLPDTTGK GALMFAKRRE RMDQITAQKE EDKVGGTPSR EQDAAQTDGL RTTTSYQRKE |
| | EESVRTQSSV SKSYIEVSHG LGHVPQQNGF SGTSETANIQ RMVPMNRTAK PFPGSVNQPA |
| | TPFSPTRNMT SPIADFPAPP PYSAVTPPPD AFSRGVSSPI AGPAQPPPWP QPAPWSQPAF |

YDSSERIASR DERISVPAKR TGILQEAKRR STTKPMFTFK EPKVSPNPEL LSLLQNSEGK
RGTGAGGDSG PEEDYLSLGA EACNFMQSSS AKQKTPPPVA PKPAVKSSSS QPVTPVSPVW
SPGVAPTQPP AFPTSNPSKG TVVSSIKIAQ PSYPPARPAS TLNVAGPFKG PQAAVASQNY
TPKPTVSTPT VNAVQPGAVG PSNELPGMSG RGAQLFAKRQ SRMEKYVVDS DTVQAHAARA
QSPTPSLPAS WKYSSNVRAP PPVAYNPIHS PSYPLAALKS QPSAAQPSKM GKKKGKKPLN
ALDVMKHQPY QLNASLFTFQ PPDAKDGLPQ KSSVKVNSAL AMKQALPPRP VNAASPTNVQ
ASSVYSVPAY TSPPSFFAEA SSPVSASPVP VGIPTSPKQE SASSSYFVAP RPKFSAKKSG
VTIQVWKPSV VEE Sequence without tag. The proposed 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 mammalien 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

| Target: | SYNP02 |
|-------------------|---|
| Alternative Name: | SYNP02 (SYNP02 Products) |
| Background: | Synaptopodin-2 (Genethonin-2) (Myopodin),FUNCTION: Has an actin-binding and actin-bundling activity. Can induce the formation of F-actin networks in an isoform-specific manner |
| | (PubMed:24005909, PubMed:23225103). At the sarcomeric Z lines is proposed to act as |

adapter protein that links nascent myofibers to the sarcolemma via ZYX and may play a role in early assembly and stabilization of the Z lines. Involved in autophagosome formation. May play a role in chaperone-assisted selective autophagy (CASA) involved in Z lines maintenance in striated muscle under mechanical tension, may link the client-processing CASA chaperone machinery to a membrane-tethering and fusion complex providing autophagosome membranes (By similarity). Involved in regulation of cell migration (PubMed:22915763,

PubMed:25883213). May be a tumor suppressor (PubMed:16885336).

{ECO:0000250|UniProtKB:D4A702, ECO:0000250|UniProtKB:Q91YE8,

ECO:0000269|PubMed:22915763, ECO:0000269|PubMed:23225103,

ECO:0000269|PubMed:24005909, ECO:0000269|PubMed:25883213,

 $ECO:0000305 | PubMed:16885336, ECO:0000305 | PubMed:20554076 \}., FUNCTION: [Isoform 1]: Involved in regulation of cell migration. Can induce formation of thick, irregular actin bundles in the cell body. \\ {ECO:0000269 | PubMed:22915763, ECO:0000269 | PubMed:24005909 }.,$

FUNCTION: [Isoform 2]: Involved in regulation of cell migration. Can induce long, well-organized

actin bundles frequently orientated in parallel along the long axis of the cell showing characteristics of contractile ventral stress fibers. {ECO:0000269|PubMed:22915763, ECO:0000269|PubMed:24005909}., FUNCTION: [Isoform 3]: Involved in regulation of cell migration. Can induce an amorphous actin meshwork throughout the cell body containing a

{ECO:0000269|PubMed:22915763, ECO:0000269|PubMed:24005909}., FUNCTION: [Isoform 4]: Can induce long, well-organized actin bundles frequently orientated in parallel along the long axis of the cell showing characteristics of contractile ventral stress fibers.

mixture of long and short, randomly organized thick and thin actin bundles.

{ECO:0000269|PubMed:24005909}., FUNCTION: [Isoform 5]: Involved in regulation of cell migration in part dependent on the Rho-ROCK cascade, can promote formation of nascent focal adhesions, actin bundles at the leading cell edge and lamellipodia (PubMed:22915763, PubMed:25883213). Can induce formation of thick, irregular actin bundles in the cell body, the induced actin network is associated with enhanced cell migration in vitro.

{ECO:0000269|PubMed:22915763, ECO:0000269|PubMed:24005909,

ECO:0000269|PubMed:25883213}.

Molecular Weight:

117.5 kDa

UniProt:

Q9UMS6

Application Details

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

Application Details

| | guarantee though. |
|------------------|--|
| Restrictions: | For Research Use only |
| Handling | |
| 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 |