

Datasheet for ABIN7564989

## SUN1 Protein (AA 1-913) (His tag)



[Go to Product page](#)

### Overview

Quantity:	1 mg
Target:	SUN1
Protein Characteristics:	AA 1-913
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This SUN1 protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS)

### Product Details

Purpose:	Custom-made recombinat Sun1 Protein expressed in mammalian cells.
Sequence:	<p>MDFSRLHTYT PPQCVPEPTG YTYALSSSYS SDALDFETEH KLEPVFDSPP MSRRSLRLVT</p> <p>TASYSSGDSQ AIDSHISTSR ATPAKGRETR TVKQRRSASK PAFSINHLSG KGLSSSTSHD</p> <p>SSCSLRSATV LRHPVLDESL IREQTKVDHF WGLDDDGLK GGNKAATQGN GELAAEVASS</p> <p>NGYTCRDCRM LSARTDALTA HSAIHGTTSR VYSRDRTLKP RGVSFYLDRT LWLAKSTSSS</p> <p>FASFIVQLFQ VVLMKLNFEY YKLKGYESRA YESQSYETKS HESEAHLGHC GRMTAGELSR</p> <p>VDGESLCDDC KGKKHLEIHT ATHSQLPQPH RVAGAMGRCL IYTGDLLVQA LRRTRAAGWS</p> <p>VAEAVWSVLW LAVSAPGKAA SGTFWWLGGG WYQFVTLISW LNVFLLTRCL RNICKVFVLL</p> <p>LPLLLLLGAG VSLWGQGNFF SLLPVLNWTM MQPTQRVDDS KGMHRPGPLP PSLPPKVDHK</p> <p>ASQWPQESDM GQKVASLSAQ CHNHDERLAE LTVLLQKLQI RVDQVDDGRE GLSLVWKNVV</p> <p>GQHLQEMGTI EPPDAKTDFM TFHHDHEVRL SNLEDVLRKL TEKSEAIQKE LEETKLKAGS</p> <p>RDEEQPLLDR VQHLELELNL LKSQLSDWQH LKTSCEQAGA RIQETVQLMF SEDQQGGSLE</p>

WLLEKLSSRF VSKDELQVLL HDLELKLLQN ITHHITVTGQ APTSEAIVSA VNQAGISGIT  
EAQAHIIVNN ALKLYSQDKT GMVDFALESG GGSILSTRCS ETYETKTALL SLFGVPLWYF  
SQSPRVVIQP DIYPGNCWAF KGSQGYLVVR LSMKIYPTTF TMEHIPKTLS PTGNISSAPK  
DFAVYGLETE YQEEGQPLGR FTYDQEGDSL QMFHTLERPD QAFQIVELRV LSNWGHPEYT  
CLYRFRVHGE PIQ **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 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

### Target:

SUN1

### Alternative Name:

Sun1 ([SUN1 Products](#))

### Background:

SUN domain-containing protein 1 (Protein unc-84 homolog A) (Sad1/unc-84 protein-like 1),FUNCTION: As a component of the LINC (Linker of Nucleoskeleton and Cytoskeleton) complex involved in the connection between the nuclear lamina and the cytoskeleton (PubMed:20711465, PubMed:16380439, PubMed:24062341, PubMed:25892231, PubMed:26842404). The nucleocytoplasmic interactions established by the LINC complex play an important role in the transmission of mechanical forces across the nuclear envelope and in

Target Details

nuclear movement and positioning (PubMed:19874786). Required for interkinetic nuclear migration (INM) and essential for nucleokinesis and centrosome-nucleus coupling during radial neuronal migration in the cerebral cortex and during glial migration (PubMed:19874786). Involved in telomere attachment to nuclear envelope in the prophase of meiosis implicating a SUN1/2:KASH5 LINC complex in which SUN1 and SUN2 seem to act at least partial redundantly (PubMed:17543860, PubMed:19211677, PubMed:19509342, PubMed:24062341, PubMed:25892231, PubMed:26842404). Required for gametogenesis and involved in selective gene expression of coding and non-coding RNAs needed for gametogenesis (PubMed:17543860). Helps to define the distribution of nuclear pore complexes (NPCs) (PubMed:17724119). Required for efficient localization of SYNE4 in the nuclear envelope (PubMed:23348741). May be involved in nuclear remodeling during sperm head formation in spermatogenesis (PubMed:20711465). May play a role in DNA repair by suppressing non-homologous end joining repair to facilitate the repair of DNA cross-links (By similarity). {ECO:0000250|UniProtKB:O94901, ECO:0000269|PubMed:16380439, ECO:0000269|PubMed:17543860, ECO:0000269|PubMed:17724119, ECO:0000269|PubMed:19211677, ECO:0000269|PubMed:19509342, ECO:0000269|PubMed:19874786, ECO:0000269|PubMed:20711465, ECO:0000269|PubMed:23348741, ECO:0000269|PubMed:24062341, ECO:0000269|PubMed:25892231, ECO:0000269|PubMed:26842404}., FUNCTION: Isoform 5 may be involved in nuclear remodeling during sperm head formation in spermatogenesis. A probable SUN1 isoform 5:SYNE3 LINC complex may tether spermatid nuclei to anterior cytoskeletal structures such as actin filaments present at membraneous junctions of spermatids and Sertoli cells. {ECO:0000305|PubMed:20711465}.

Molecular Weight: 102.0 kDa

UniProt: [Q9D666](#)

Pathways: [Maintenance of Protein Location](#)

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 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