

Datasheet for ABIN3136192

SUN2 Protein (AA 1-731) (rho-1D4 tag)[Go to Product page](#)**1** Image

Overview

| | |
|-------------------------------|--|
| Quantity: | 1 mg |
| Target: | SUN2 |
| Protein Characteristics: | AA 1-731 |
| Origin: | Mouse |
| Source: | Insect Cells |
| Protein Type: | Recombinant |
| Purification tag / Conjugate: | This SUN2 protein is labelled with rho-1D4 tag. |
| Application: | ELISA, Western Blotting (WB), Crystallization (Crys), SDS-PAGE (SDS) |

Product Details

| | |
|-----------|---|
| Sequence: | MSRRSQRLTR YSQDDNDGGS SSSGASSVAG SQGTVFKDSP LRTLKRKSSN MKHLSPAPQL GPSSDSHTSY YSESVVRESY IGSPRAVSLA RSALLDDHLH SEPYWSGDLR GRRRRGTGGS ESSKANGLTA ESKASEDFFG SSSGYSSDED LAGYTDSDQH SSGSRLRSAA SRAGSFVWTL VTFPGRLFGL LYWWIGTTWY RLTTAASLLD VFLTRSRHF SLNLKSFLWF LLLLLLLTGL TYGAWHFYPL GLQTLQPAVV SWWAAKESRK QPEVWESRDA SQHFQAEQRV LSRVHSLERR LEALADFSS NWQKEAIRLE RLELRQGAAG HGGGSSLSHE DALSLLEGLV SRREATLKED LRRDTVAAHIQ EELATLRAEH HQDSEDLFKK IVQASQESEA RVQQLKTEWK SMTQEAFQES SVKELGRLEA QLASLRQELA ALTLKQNSVA DEVGLLPQKI QAARADVESQ FPDWIRQFLL GDRGARSGLL QRDEMHAQLQ ELENKILTKM AEMQKKSARE AAASLGQILQ KEGIVGVTEE QVHRIVKQAL QRYSEDRIGM VDYALESGGA SVISTRCSSET YETKTALLSL FGIPLWYHSQ SPRVILQPDV HPGNCWAFQG PQGFAVVRLS ARIRPTAVTL EHPKALSPN STISSAPKDF AIFGFDEDLQ QEGTLLGTFA YDQDGEPIQT FYFQASKMAT YQVVELRILT NWGHPEYTCI |
|-----------|---|

YRFRVHGEPA H

Sequence without tag. Tag location is at the discretion of the manufacturer. If you have a special request, please contact us.

Characteristics:

- Made in Germany - from design to production - by highly experienced protein experts.
- Mouse Sun2 Protein (raised in Insect Cells) purified by multi-step, protein-specific process to ensure crystallization grade.
- 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 will ensure that you receive a correctly folded protein.

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.

In the unlikely event that the protein cannot be expressed or purified we do not charge anything (other companies might charge you for any performed steps in the expression process for custom-made proteins, e.g. fees might apply for the expression plasmid, the first expression experiments or purification optimization).

When you order this made-to-order protein you will only pay upon receipt of the correctly folded protein. With no financial risk on your end you can rest assured that our experienced protein experts will do everything to make sure that you receive the protein you ordered.

The concentration of our recombinant proteins is measured using the absorbance at 280nm. The protein's absorbance will be measured in several dilutions and is measured against its specific reference buffer.

The concentration of the protein is calculated using its specific absorption coefficient. We use the Expasy's protparam tool to determine the absorption coefficient of each protein.

Purification:

Three step purification of membrane proteins expressed in baculovirus infected SF9 insect cells:

1. Membrane proteins are fractioned by ultracentrifugation and subsequently solubilized with different detergents (detergent screen). Samples are analyzed by Western blot.
2. The best performing detergent is used for solubilization and the proteins are purified via their rho1D4 tag via two rho1D4 antibody columns: one DTT resistant, the other one not. Eluate fractions are analyzed by Western blot.
3. Protein containing fractions of the best purification are subjected to second purification step through size exclusion chromatograph. Eluate fractions are analyzed by SDS-PAGE and Western blot.

Purity:

>95 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.

Sterility:

0.22 µm filtered

Product Details

Endotoxin Level: Protein is endotoxin-free.

Grade: Crystallography grade

Target Details

Target: SUN2

Alternative Name: Sun2 ([SUN2 Products](#))

Background: Component of SUN-protein-containing multivariate complexes also called LINC complexes which link the nucleoskeleton and cytoskeleton by providing versatile outer nuclear membrane attachment sites for cytoskeletal filaments. Specifically, Syne2 and Sun2 assemble in arrays of transmembrane actin-associated nuclear (TAN) lines which are bound to F-actin cables and couple the nucleus to retrograde actin flow during actin-dependent nuclear movement. 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. Anchors chromosome movement in the prophase of meiosis and is involved in selective gene expression of coding and non-coding RNAs needed for gametogenesis. Required for telomere attachment to nuclear envelope and gametogenesis. May also function on endocytic vesicles as a receptor for Rab5-GDP and participate in the activation of Rab5. {ECO:0000269|PubMed:16380439, ECO:0000269|PubMed:19509342, ECO:0000269|PubMed:19843581, ECO:0000269|PubMed:19874786, ECO:0000269|PubMed:20724637}.

Molecular Weight: 82.8 kDa Including tag.

UniProt: [Q8BJS4](#)

Pathways: [Maintenance of Protein Location](#), [SARS-CoV-2 Protein Interactome](#), [The Global Phosphorylation Landscape of SARS-CoV-2 Infection](#)

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.

Comment: Protein has not been tested for activity yet. In cases in which it is highly likely that the recombinant protein with the default tag will be insoluble our protein lab may suggest a higher molecular weight tag (e.g. GST-tag) instead to increase solubility. We will discuss all possible

Application Details

options with you in detail to assure that you receive your protein of interest.

Restrictions: For Research Use only

Handling

| | |
|------------------|--|
| Format: | Liquid |
| Buffer: | 100 mM NaCL, 20 mM Hepes, 10% glycerol. pH value 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: | Unlimited (if stored properly) |

Images



Image 1. „Crystallography Grade“ protein due to multi-step, protein-specific purification process