

Datasheet for ABIN3095562

SP100 Protein (AA 2-879) (His tag)[Go to Product page](#)**1** Image

Overview

Quantity:	1 mg
Target:	SP100
Protein Characteristics:	AA 2-879
Origin:	Human
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This SP100 protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA, Crystallization (Crys)

Product Details

Sequence:	AGGGGDLSTR RLNECISPVA NEMNHLPAS HDLQRMFTED QGVDDRLLYD IVFKHFKRNK VEISNAIKKT PPFLEGLRDR DLITNKMFEQ SQDSCRNLVP VQRVVYNVLS ELEKTFNLPV LEALFSDVNM QEYPDLIHIY KGFENVIHDK LPLQESEEEE REERSGLQLS LEQGTGENSF RSLTWPPSGS PSHAGTTPPE NGLSEHPCET EQINAKRKDT TSDKDDSLGS QQTNEQCAQK AEPTESCEQI AVQVNNGDAG REMPCPLPCD EESPEAELHN HGIQINSCSV RLVDIKKEKP FSNSKVECQA QARTHNNQAS DIIVISSEDS EGSTDVDEPL EVFISAPRSE PVINNDNPLE SNDEKEGQEA TCSRQIVPE PMDFRKLSTF RESFKKRVIG QDHDFSESSE EEAPAEASSG ALRSKHGEKA PMTSRSTSTW RIPSRRRRFS SSDFSDLSNG EELQETCSSS LRRGSGSQPQ EPENKKCSCV MCFPKGVPVS QEARTESSQA SDMMDTMDVE NNSTLEKHSG KRRKKRRHRS KVNLQQRGRK KDRPRKHLTL NNKVQKKRWQ QRGRKANTRP LKRRRKRGRPR IPKDENINFK QSELPVTCGE VKGTLYKERF KQGTSKKCIQ SEDKKWFTPR EFEIEGDRGA SKNWKLSIRC GGYTLKVLME NKFLPEPPST RKKRILESHN NTLVDPCEEH KKKNPDAVK FSEFLKKCSE
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TWKTIFAKEK GKFDMAKAD KAHYEREMKT YIPPKGEKKK KFKDPNAPKR PPLAFFLFC
EYRPKIKGEH PGLSIDDVVK KLAGMWNNTA AADKQFYEEK AAKLKEYKK DIAAYRAKGK
PNSAKKRVVK AEKSKKKKEE EEDEEDEQEE ENEEDDDK

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.
- Human SP100 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:

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

1. In a first purification step, the protein is purified from the cleared cell lysate using three different His-tag capture materials: high yield, EDTA resistant, or DTT resistant. Eluate fractions are analyzed by SDS-PAGE.
2. Protein containing fractions of the best purification are subjected to second purification step through size exclusion chromatography. 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: SP100

Alternative Name: SP100 ([SP100 Products](#))

Background: Together with PML, this tumor suppressor is a major constituent of the PML bodies, a subnuclear organelle involved in a large number of physiological processes including cell growth, differentiation and apoptosis. Functions as a transcriptional coactivator of ETS1 and ETS2 according to PubMed:11909962. Under certain conditions, it may also act as a corepressor of ETS1 preventing its binding to DNA according to PubMed:15247905. Through the regulation of ETS1 it may play a role in angiogenesis, controlling endothelial cell motility and invasion. Through interaction with the MRN complex it may be involved in the regulation of telomeres lengthening. May also regulate TP53-mediated transcription and through CASP8AP2, regulate FAS-mediated apoptosis. Also plays a role in infection by viruses, including human cytomegalovirus and Epstein-Barr virus, through mechanisms that may involve chromatin and/or transcriptional regulation. {ECO:0000269|PubMed:11909962, ECO:0000269|PubMed:14647468, ECO:0000269|PubMed:15247905, ECO:0000269|PubMed:15592518, ECO:0000269|PubMed:15767676, ECO:0000269|PubMed:16177824, ECO:0000269|PubMed:17245429, ECO:0000269|PubMed:21274506, ECO:0000269|PubMed:21880768}.

Molecular Weight: 101.2 kDa Including tag.

UniProt: [P23497](#)

Pathways: [Retinoic Acid Receptor Signaling Pathway](#)

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: 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 options with you in detail to assure that you

Application Details

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