

Datasheet for ABIN3095548
SMARCAL1 Protein (AA 2-954) (His tag)[Go to Product page](#)

1 Image

Overview

Quantity:	1 mg
Target:	SMARCAL1
Protein Characteristics:	AA 2-954
Origin:	Human
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This SMARCAL1 protein is labelled with His tag.
Application:	ELISA, Western Blotting (WB), Crystallization (Crys), SDS-PAGE (SDS)

Product Details

Sequence:	SLPLTEEQRK KIEENRQKAL ARRAEKLLAE QHQTSSGTS IAGNPFQAKQ GPSQNFPRES CKPVSHGVIF KQQLNLSSSN ADQRPHDSHS FQAKGIWKKP EEMPTACPGH SPRSQMALTG ISPPLAQSPPEVPKQQLLSY ELGQGHAQAS PEIRFTPFAN PTHKPLAKPK SSQETPAHSS GQPPRDAKLE AKTAKASPSG QNISIYHSSS ESVTPRTEGR LQKSGSSVQ KGVNSQKGKC VRNGDRFQVL IGYNALIAV FKTLPSKNYD PDTKTWNFSM NDYSALMKAA QSLPTVNLQP LEWAYGSSSES PSTSSEGGAG LPSAPSLSFV KGRCMLISRA YFEADISYSQ DLIALFKQMD SRRYDVKTRK WSFLLEEHSK LIAKVRCLPQ VQLDPLPTTL TLAFASQLKK TSLSLTPDVP EADLSEVDPK LVSNLMPFQR AGVNFAIAKG GRLLLADDMG LGKTIQAICI AAFYRKEWPL LVVVPSSVRF TWEQAFLRWL PSLSPDCINV VVTGKDRLTA GLINIVSFDL LSKLEKQLKT PFKVVIIDES HFLKNSRTAR CRAAMPVLKV AKRVLLSGT PAMSRPAELY TQIIAVKPTF FPQFHAFGLR YCDAKRMPWG WDYSGSSNLG ELKLLLEEAV MLRRLKSDVL SQLPAKQRKI VVIAPGRINA RTRAAALDAAA KEMTTKDKTK QQQKDALILF FNRTAEAKIP SVIEYILDLL
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ESGREKFLVF AHHKVVLDAI TQELERKHVQ HIRIDGSTSS AEREDLCQQF QLSEHVAVAV
LSITAANMGL TFSSADLVVF AELFWNPGVL IQAEDRVHRI GQTSSVGIHY LVAKGTADDY
LWPLIQEKIK VLAEAGLSET NFSEMTESTD YLYKDPKQKQK IYDLFQKSFE KEGSDMELLE
AAESFDPGSA SGTSGSSSQN MGDTLDESSL TASPQKKRRF EFFDNWDSFT SPL

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 SMARCAL1 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.

Product Details

Sterility:	0.22 µm filtered
Endotoxin Level:	Protein is endotoxin free.
Grade:	Crystallography grade

Target Details

Target:	SMARCAL1
Alternative Name:	SMARCAL1 (SMARCAL1 Products)
Background:	ATP-dependent annealing helicase that binds selectively to fork DNA relative to ssDNA or dsDNA and catalyzes the rewinding of the stably unwound DNA. Rewinds single-stranded DNA bubbles that are stably bound by replication protein A (RPA). Acts throughout the genome to reanneal stably unwound DNA, performing the opposite reaction of many enzymes, such as helicases and polymerases, that unwind DNA. May play an important role in DNA damage response by acting at stalled replication forks. {ECO:0000269 PubMed:18974355, ECO:0000269 PubMed:19793861, ECO:0000269 PubMed:19793862}.
Molecular Weight:	106.8 kDa Including tag.
UniProt:	Q9NZC9
Pathways:	Embryonic Body Morphogenesis

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 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

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