

Datasheet for ABIN3095524

SMARCD1 Protein (AA 1-515) (His tag)[Go to Product page](#)**1** Image

Overview

Quantity:	1 mg
Target:	SMARCD1
Protein Characteristics:	AA 1-515
Origin:	Human
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This SMARCD1 protein is labelled with His tag.
Application:	ELISA, Western Blotting (WB), Crystallization (Crys), SDS-PAGE (SDS)

Product Details

Sequence: MAARAGFQSV APSGGAGASG GAGAAAALGP GGTPGPPVRM GPAPGQGLYR SPMPGAAYPR
PGMLPGSRMT PQGPSMGPPG YGGNPSVRPG LAQSGMDQSR KRPAPQQIQQ VQQQAVQNRN
HNAKKKKMAD KILPQRIREL VPESQAYMDL LAFERKLDQT IMRKRLDIQE ALKRPIKQKR
KLRIFISNTF NPAKSDAEDG EGTVASWELR VEGRLLEDSA LSKYDATKQK RKFSSFFKSL
VIELDKDLYG PDNHLVEWHR TATTQETDGF QVKRPGDVNV RCTVLLMLDY QPPQFKLDPR
LARLLGIHTQ TRPVIIQALW QYIKTHKLQD PHEREFVICD KYLQQIFESQ RMKFSEIPQR
LHALLMPPEP IINHVISVD PNDQKKTACY DIDVEVDDTL KTQMNSFLLS TASQQEIATL
DNKIHETIET INQLKTQREF MLSFARDPQG FINDWLQSQC RDLKTM TDVV GNPEEEERRAE
FYFQPWAQEA VCRYFYSKVQ QRRQEELEQAL GIRNT

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

Product Details

- Characteristics:
- Made in Germany - from design to production - by highly experienced protein experts.
 - Human SMARCD1 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

Endotoxin Level: Protein is endotoxin free.

Grade: Crystallography grade

Target Details

Target:	SMARCD1
Alternative Name:	SMARCD1 (SMARCD1 Products)
Background:	<p>Involved in chromatin remodeling. Belongs to the neural progenitors-specific chromatin remodeling complex (npBAF complex) and the neuron-specific chromatin remodeling complex (nBAF complex). During neural development a switch from a stem/progenitor to a post-mitotic chromatin remodeling mechanism occurs as neurons exit the cell cycle and become committed to their adult state. The transition from proliferating neural stem/progenitor cells to post-mitotic neurons requires a switch in subunit composition of the npBAF and nBAF complexes. As neural progenitors exit mitosis and differentiate into neurons, npBAF complexes which contain ACTL6A/BAF53A and PHF10/BAF45A, are exchanged for homologous alternative ACTL6B/BAF53B and DPF1/BAF45B or DPF3/BAF45C subunits in neuron-specific complexes (nBAF). The npBAF complex is essential for the self-renewal/proliferative capacity of the multipotent neural stem cells. The nBAF complex along with CREST plays a role regulating the activity of genes essential for dendrite growth (By similarity). Has a strong influence on vitamin D-mediated transcriptional activity from an enhancer vitamin D receptor element (VDRE). May be a link between mammalian SWI-SNF-like chromatin remodeling complexes and the vitamin D receptor (VDR) heterodimer. Mediates critical interactions between nuclear receptors and the BRG1/SMARCA4 chromatin-remodeling complex for transactivation. {ECO:0000250, ECO:0000269 PubMed:12917342, ECO:0000269 PubMed:14698202, ECO:0000269 PubMed:8804307}.</p>
Molecular Weight:	59.2 kDa Including tag.
UniProt:	Q96GM5

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 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