

Datasheet for ABIN3095496

SMARCA5 Protein (AA 2-1052) (His tag)



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1 Image

Overview

Quantity:	1 mg
Target:	SMARCA5
Protein Characteristics:	AA 2-1052
Origin:	Human
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This SMARCA5 protein is labelled with His tag.
Application:	ELISA, Western Blotting (WB), Crystallization (Crys), SDS-PAGE (SDS)

Product Details

Sequence:	SSAAEPPPPP PPESAPSKPA ASIASSGGSNS SNKGGPEGVA AQAVASAASA GPADAEMEEI FDDASPGKQK EIQEPDPTYE EKMQTDRANR FEYLLKQTEL FAHFIQPAAQ KTPTSPLKMK PGRPRIKKDE KQNLLSVGDY RHRRTQEED EELLTESSKA TNVCTRFEDS PSYVKWGLR DYQVRGLNWL ISLYENGING ILADEMGLGK TLQTISLLGY MKHYRNIPGP HMLVLPKSTL HNWMSEFKRW VPTLRVCLI GDKEQRAAFV RDVLLPGEWD VCVTSYEMLI KEKSVFKKFN WRYLVIDEAH RIKNEKSKLS EIVREFKTTN RLLLTGTPLQ>NNLHELWSLL>NFLLPDVFNS ADDFDSWFDT>NNCLGDQKLV>ERLHMVLRPF>LLRRIKADVE>KSLPPKKEVK>IYVGLSKMQR EWYTRILMKD>IDILNSAGKM>DKMRLLNILM>QLRKCCNHPY>LFDGAEPGPP>YTDMHLVTN SGKMVVLDKL>LPKLKEQGS>RVLIFSQMTRV>LDILEDYCMW>RNYEYCRLDG>QTPHDERQDS INAYNEPNST>KFVFM>LSTRA>GGLGINLATA>DVVILYDSDW>NPQVDLQAMD>RAHRIGQTKT VRVFRFITDN>TVEERIVERA>EMKLR>LD>SIV>IQQGRLVDQN>LNKIGKDEML>QMIRHGATHV FASKESEITD>EDIDGILERG>AKKTAEMNEK>LSKMGESSLR>NFTMDTESSV>YNFEGEDYRE
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KQKIAFTEWI EPPKRERKAN YAVDAYFREA LRVSEPKAPK APRPPKQPNV QDFQFFPPRL
FELLEKEILF YRKTIGYKVP RNPELPNAAQ AQKEEQLKID EAESLNDEEL EEKEKLLTQG
FTNWNKRDFN QFIKANEKWG RDDIENIARE VEGKTPEEVI EYSAVFWERC NELQDIEKIM
AQIERGEARI QRRISIKKAL DTKIGRYKAP FHQLRISYGT NKGKNYTEEE DRFLICMLHK
LGFDKENVYD ELRQCIRNSP QFRFDWFLKS RTAMELQRRRC NTLITLIERE NMELEEKEKA
EKKKRGPKPS TQKRKMDGAP DGRGRKKKLK L

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 SMARCA5 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.

Product Details

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:	SMARCA5
Alternative Name:	SMARCA5 (SMARCA5 Products)
Background:	<p>Helicase that possesses intrinsic ATP-dependent nucleosome-remodeling activity. Complexes containing SMARCA5 are capable of forming ordered nucleosome arrays on chromatin, this may require intact histone H4 tails. Also required for replication of pericentric heterochromatin in S-phase specifically in conjunction with BAZ1A. Probably plays a role in repression of polI dependent transcription of the rDNA locus, through the recruitment of the SIN3/HDAC1 corepressor complex to the rDNA promoter. Essential component of the WICH complex, a chromatin remodeling complex that mobilizes nucleosomes and reconfigures irregular chromatin to a regular nucleosomal array structure. The WICH complex regulates the transcription of various genes, has a role in RNA polymerase I and RNA polymerase III transcription, mediates the histone H2AX phosphorylation at 'Tyr-142', and is involved in the maintenance of chromatin structures during DNA replication processes. Essential component of the NoRC (nucleolar remodeling complex) complex, a complex that mediates silencing of a fraction of rDNA by recruiting histone-modifying enzymes and DNA methyltransferases, leading to heterochromatin formation and transcriptional silencing. {ECO:0000269 PubMed:10880450, ECO:0000269 PubMed:11980720, ECO:0000269 PubMed:12198550, ECO:0000269 PubMed:12434153, ECO:0000269 PubMed:12972596, ECO:0000269 PubMed:15543136, ECO:0000269 PubMed:16603771}.</p>
Molecular Weight:	122.7 kDa Including tag.
UniProt:	O60264
Pathways:	Chromatin Binding

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
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Application Details

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