Datasheet for ABIN3095495

SMARCA1 Protein (AA 1-1054) (Strep Tag)

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Overview

Quantity:	250 µg
Target:	SMARCA1
Protein Characteristics:	AA 1-1054
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This SMARCA1 protein is labelled with Strep Tag.
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB)

Product Details

Brand:	AliCE®
Sequence:	MEQDTAAVAA TVAAADATAT IVVIEDEQPG PSTSQEEGAA AAATEATAAT EKGEKKKEKN VSSFQLKLAA KAPKSEKEMD PEYEEKMKAD RAKRFEFLLK QTELFAHFIQ PSAQKSPTSP LNMKLGRPRI KKDEKQSLIS AGDYRHRRTE QEEDEELLSE SRKTSNVCIR FEVSPSYVKG GPLRDYQIRG LNWLISLYEN GVNGILADEM GLGKTLQTIA LLGYLKHYRN IPGPHMVLVP KSTLHNWMNE FKRWVPSLRV ICFVGDKDAR AAFIRDEMMP GEWDVCVTSY EMVIKEKSVF KKFHWRYLVI DEAHRIKNEK SKLSEIVREF KSTNRLLLTG TPLQNNLHEL WALLNFLLPD VFNSADDFDS WFDTKNCLGD QKLVERLHAV LKPFLLRRIK TDVEKSLPPK KEIKIYLGLS KMQREWYTKI LMKDIDVLNS SGKMDKMRLL NILMQLRKCC NHPYLFDGAE PGPPYTTDEH IVSNSGKMVV LDKLLAKLKE QGSRVLIFSQ MTRLLDILED YCMWRGYEYC RLDGQTPHEE REDKFLEVEF LGQREAIEAF NAPNSSKFIF MLSTRAGGLG INLASADVVI LYDSDWNPQV DLQAMDRAHR IGQKKPVRVF RLITDNTVEE RIVERAEIKL RLDSIVIQQG RLIDQQSNKL

AKEEMLQMIR HGATHVFASK ESELTDEDIT TILERGEKKT AEMNERLQKM GESSLRNFRM DIEQSLYKFE GEDYREKQKL GMVEWIEPPK RERKANYAVD AYFREALRVS EPKIPKAPRP PKQPNVQDFQ FFPPRLFELL EKEILYYRKT IGYKVPRNPD IPNPALAQRE EQKKIDGAEP LTPEETEEKE KLLTQGFTNW TKRDFNQFIK ANEKYGRDDI DNIAREVEGK SPEEVMEYSA VFWERCNELQ DIEKIMAQIE RGEARIQRRI SIKKALDAKI ARYKAPFHQL RIQYGTSKGK NYTEEEDRFL ICMLHKMGFD RENVYEELRQ CVRNAPQFRF DWFIKSRTAM EFQRRCNTLI SLIEKENMEI EERERAEKKK RATKTPMVKF SAFS

Sequence without tag. The proposed Strep-Tag is based on experience s with the expression system, a different complexity of the protein could make another tag necessary. In case you have a special request, please contact us.

Characteristics:

Key Benefits:

- Made in Germany - from design to production - by highly experienced protein experts.
- Protein expressed with ALiCE® and purified in one-step affinity chromatography
- These proteins are normally active (enzymatically functional) as our customers have reported (not tested by us and not guaranteed).
- 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 try to ensure that you receive soluble 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.

Expression System:

- ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from Nicotiana tabacum c.v.. This contains all the protein expression machinery needed to produce even the most difficult-to-express proteins, including those that require post-translational modifications.
- During lysate production, the cell wall and other cellular components that are not required for protein production are removed, leaving only the protein production machinery and the mitochondria to drive the reaction. During our lysate completion steps, the additional components needed for protein production (amino acids, cofactors, etc.) are added to produce something that functions like a cell, but without the constraints of a living system - all that's needed is the DNA that codes for the desired protein!

Concentration:

- The concentration of our recombinant proteins is measured using the absorbance at 280nm.

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- The protein's absorbance will be measured against its specific reference buffer.
- We use the Expasy's ProtParam tool to determine the absorption coefficient of each protein.

Purification:	One-step Strep-tag purification of proteins expressed in Almost Living Cell-Free Expression System (AliCE®).
Purity:	> 70-80 % as determined by SDS PAGE, Western Blot and analytical SEC (HPLC).
Grade:	custom-made

Target Details

Target:	SMARCA1
Alternative Name:	SMARCA1 (SMARCA1 Products)
Background:	Probable global transcription activator SNF2L1 (EC 3.6.4.-) (ATP-dependent helicase SMARCA1) (Nucleosome-remodeling factor subunit SNF2L) (SWI/SNF-related matrix-associated actin-dependent regulator of chromatin subfamily A member 1),FUNCTION: [Isoform 1]: Catalytically inactive when either DNA or nucleosomes are the substrate and does not possess chromatin-remodeling activity (PubMed:15310751, PubMed:28801535). Acts as a negative regulator of chromatin remodelers by generating inactive complexes (PubMed:15310751). {ECO:0000269|PubMed:15310751, ECO:0000269|PubMed:28801535}., FUNCTION: [Isoform 2]: Helicase that possesses intrinsic ATP-dependent chromatin-remodeling activity (PubMed:15310751, PubMed:14609955, PubMed:15640247, PubMed:28801535). ATPase activity is substrate-dependent, and is increased when nucleosomes are the substrate, but is also catalytically active when DNA alone is the substrate (PubMed:15310751, PubMed:14609955, PubMed:15640247). Catalytic subunit of ISWI chromatin-remodeling complexes, which form ordered nucleosome arrays on chromatin and facilitate access to DNA during DNA-templated processes such as DNA replication, transcription, and repair (PubMed:15310751, PubMed:14609955, PubMed:15640247, PubMed:28801535). Within the ISWI chromatin-remodeling complexes, slides edge- and center-positioned histone octamers away from their original location on the DNA template (PubMed:28801535). Catalytic activity and histone octamer sliding propensity is regulated and determined by components of the ISWI chromatin-remodeling complexes (PubMed:28801535). The BAZ1A-, BAZ1B-, BAZ2A- and BAZ2B-containing ISWI chromatin-remodeling complexes regulate the spacing of nucleosomes along the chromatin and have the ability to slide mononucleosomes to the center of a DNA template (PubMed:28801535). The CECR2- and

Target Details

	RSF1-containing ISWI chromatin-remodeling complexes do not have the ability to slide mononucleosomes to the center of a DNA template (PubMed:28801535). Within the NURF-1 and CERF-1 ISWI chromatin remodeling complexes, nucleosomes are the preferred substrate for its ATPase activity (PubMed:14609955, PubMed:15640247). Within the NURF-1 ISWI chromatin-remodeling complex, binds to the promoters of En1 and En2 to positively regulate their expression and promote brain development (PubMed:14609955). May promote neurite outgrowth (PubMed:14609955). May be involved in the development of luteal cells (PubMed:16740656). {ECO:0000269|PubMed:14609955, ECO:0000269|PubMed:15310751, ECO:0000269|PubMed:15640247, ECO:0000269|PubMed:16740656, ECO:0000269|PubMed:28801535}.
Molecular Weight:	122.6 kDa
UniProt:	P28370
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 though.
Comment:	ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from Nicotiana tabacum c.v.. This contains all the protein expression machinery needed to produce even the most difficult-to-express proteins, including those that require post-translational modifications. During lysate production, the cell wall and other cellular components that are not required for protein production are removed, leaving only the protein production machinery and the mitochondria to drive the reaction. During our lysate completion steps, the additional components needed for protein production (amino acids, cofactors, etc.) are added to produce something that functions like a cell, but without the constraints of a living system - all that's needed is the DNA that codes for the desired protein!
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer.

Handling

	Standard Storage Buffer: PBS pH 7.4, 10 % Glycerol **Might differ depending on protein.**
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months