

Datasheet for ABIN755526

**SMARCA1 Protein (AA 1-1054) (His tag)**[Go to Product page](#)

## Overview

Quantity:	1 mg
Target:	SMARCA1
Protein Characteristics:	AA 1-1054
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This SMARCA1 protein is labelled with His tag.
Application:	SDS-PAGE (SDS), Western Blotting (WB)

## Product Details

Purpose:	Custom-made recombinat SMARCA1 Protein expressed in mammalian cells.
Sequence:	MEQDTAAVAA TVAAADATAT IVVIEDEQPG PSTSQEEGAA AAATEATAAT EKGEKKKEKN VSSFQLKLAA KAPKSEKEMD PEYEEKMKAD RAKRFEFLK QTELFHFHQ PSAQKSPTSP LNMKLGPRRI KKDEKQLSIS AGDYRHRRTQ QEEDEELLSE SRKTSNVCIR FEVSPSYVKG GPLRDYQIRG LNWLISLYEN GVNGILADEM GLGKTLQTTA LLGYLKHYRN IPGPHMVLVP KSTLHNWMNE FKRWVPSLRV ICFVGDKDAR AAFIRDEMMP GEWDVCVTSY EMVIKEKSVF KKFHWRYLVI DEAHRIKNEK SKLSEIVREF KSTNRLLLTG TPLQNNLHEL WALLNFFLLPD VFNSADDFDS WFDTKNCLGD QKLVERLHAV LKPFLRRIK TDVEKSLPPK KEIKIYLGSL KMQREWYTKI LMKDIDVLNS SGKMDKMRLI NILMQLRKCC NHPYLFDAE PGPPYTTDEH IVSNSGKMVV LDKLLAKLKE QGSRVLFSQ MTRLLDILED YCMWRGYEYC RLDGQTPHEE REDKFLEVEF LGQREAEAF NAPNSSKFIF MLSTRAGGLG INLASADVVI LYDSDWNPQV DLQAMDRAHR IGQKKPVRVF RLITDNTVEE RIVERAEIKL RLDSIVIQQG RLIDQSNKL

AKEEMLQMIR HGATHVFASK ESELTDEDIT TILERGEKKT AEMNERLQKM GESSLRNFRM  
DIEQSLYKFE GEDYREKQKL GMVEWIEPPK RERKANYAVD AYFREALRVS EPKIPKAPRP  
PKQPNVQDFQ FFPRLFELL EKEILYYRKT IGYKVPRNPD IPNPALAQRE EQKKIDGAEP  
LTPEETEEKE KLLTQGFTNW TKRDFNQFIK ANEKYGRDDI DNIAREVEGK SPEEVMEYSA  
VFWERCNELQ DIEKIMAQIE RGEARIQRRI SIKKALDAKI ARYKAPFHQL RIQYGTSKGG  
NYTEEEDRFL ICMLHKMGFD RENVYEELRQ CVRNAPQFRF DWFIKSRTAM EFQRRCNTLI  
SLIEKENMEI EERERAEKKK RATKTPMVKF SAFS **Sequence without tag. The proposed  
Purification-Tag is based on experiences 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 to order protein - from design to production - by highly experienced protein experts.
- Protein expressed in mammalian cells and purified in one-step affinity chromatography
- The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins.
- 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.

If you are not interested in a full length protein, please contact us for individual protein fragments.

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.

---

### Purity:

> 90 % as determined by Bis-Tris Page, Western Blot

---

### 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:

## Target Details

---

[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 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.

---

Restrictions: For Research Use only

---

## Handling

---

Format: Liquid

---

Buffer: The buffer composition 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: 12 months

---