

Datasheet for ABIN3131810

SMARCE1 Protein (AA 1-411) (His tag)[Go to Product page](#)**1** Image

Overview

Quantity:	1 mg
Target:	SMARCE1
Protein Characteristics:	AA 1-411
Origin:	Mouse
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Purification tag / Conjugate:	This SMARCE1 protein is labelled with His tag.
Application:	ELISA, Western Blotting (WB), Crystallization (Crys), SDS-PAGE (SDS)

Product Details

Sequence: MSKRPSYAPP PTPAPATQMP STPGFVGYNP YSHLAYNNYR LGGNPGTNSR VTASSGITIP
KPPKPPDKPL MPYMRYSRKV WDQVKASNP LKLWEIGKII GGMWRDLTDE EKQEYLNEYE
AEKIEYNESM KAYHNSPAYL AYINAKSRAE AALEEEERQR QSRMEKGEPY MSIQPAEDPD
DYDDGFSMKH TATARFQRNH RLISEILSES VVPDVRVVT TARMQVLKRQ VQSLMVHQRK
LEAELLQIEE RHQEKKRKFL ESTDSFNNEL KRLCGLKVEV DMEKIAAEIA QAEEQARKRQ
EEREKEAAEQ AERSQSSMAP EEEQVANKAE EKKDEESIPM ETEETHLED T AESQQNGEEG
TSTPEDKESG QEGVDSMEVE GTSDSNTGSE SNSATVEEPP TDPVPEDEKK E

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.
 - Mouse Smarce1 Protein (raised in E. Coli) purified by multi-step, protein-specific process to ensure crystallization grade.

Product Details

- 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 bacterial culture: 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:	Endotoxin has not been removed. Please contact us if you require endotoxin removal.
Grade:	Crystallography grade

Target Details

Target:	SMARCE1
Alternative Name:	Smarce1 (SMARCE1 Products)

Target Details

Background:	<p>Involved in transcriptional activation and repression of select genes by chromatin remodeling (alteration of DNA-nucleosome topology). Required for the coactivation of estrogen responsive promoters by Swi/Snf complexes and the SRC/p160 family of histone acetyltransferases (HATs). 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. {ECO:0000250, ECO:0000269 PubMed:12110891, ECO:0000269 PubMed:12145209, ECO:0000269 PubMed:17640523}.</p>
-------------	--

Molecular Weight:	47.6 kDa Including tag.
-------------------	-------------------------

UniProt:	O54941
----------	------------------------

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:	Protein has not been tested for activity yet. 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