Datasheet for ABIN3095465

SMARCC2 Protein (AA 1-1214) (Strep Tag)

1 Image

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Overview

Quantity:	1 mg
Target:	SMARCC2
Protein Characteristics:	AA 1-1214
Origin:	Human
Source:	Tobacco (Nicotiana tabacum)
Protein Type:	Recombinant
Purification tag / Conjugate:	This SMARCC2 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Sequence:	MAVRKKDGGP NVKYYEAADT VTQFDNVRLW LGKNYKKYIQ AEPPTNKSLS SLVVQLLQFQ EEVFGKHVSN APLTKLPIKC FLDFKAGGSL CHILAAAYKF KSDQGWRRYD FQNPSRMDRN VEMFMTIEKS LVQNNCLSRP NIFLCPEIEP KLLGKLKDII KRHQGTVTED KNNASHVVYP VPGNLEEEEW VRPVMKRDKQ VLLHWGYYPD SYDTWIPASE IEASVEDAPT PEKPRKVHAK WILDTDTFNE WMNEEDYEVN DDKNPVSRRK KISAKTLTDE VNSPDSDRRD KKGGNYKKRK RSPSPSPTPE AKKKNAKKGP STPYTKSKRG HREEEQEDLT KDMDEPSPVP NVEEVTLPKT VNTKKDSESA PVKGGTMTDL DEQEDESMET TGKDEDENST GNKGEQTKNP DLHEDNVTEQ THHIIIPSYA AWFDYNSVHA IERRALPEFF NGKNKSKTPE IYLAYRNFMI DTYRLNPQEY LTSTACRRNL AGDVCAIMRV HAFLEQWGLI NYQVDAESRP TPMGPPPTSH FHVLADTPSG LVPLQPKTPQ QTSASQQMLN FPDKGKEKPT DMQNFGLRTD MYTKKNVPSK SKAAASATRE WTEQETLLLL EALEMYKDDW NKVSEHVGSR TQDECILHFL RLPIEDPYLE DSEASLGPLA YQPIPFSQSG NPVMSTVAFL ASVVDPRVAS AAAKSALEEF SKMKEEVPTA LVEAHVRKVE

EAAKVTGKAD PAFGLESSGI AGTTSDEPER IEESGNDEAR VEGQATDEKK EPKEPREGGG AIEEEAKEKT SEAPKKDEEK GKEGDSEKES EKSDGDPIVD PEKEKEPKEG QEEVLKEVVE SEGERKTKVE RDIGEGNLST AAAAALAAAA VKAKHLAAVE ERKIKSLVAL LVETQMKKLE IKLRHFEELE TIMDREREAL EYQRQQLLAD RQAFHMEQLK YAEMRARQQH FQQMHQQQQQ PPPALPPGSQ PIPPTGAAGP PAVHGLAVAP ASVVPAPAGS GAPPGSLGPS EQIGQAGSTA GPQQQQPAGA PQPGAVPPGV PPPGPHGPSP FPNQQTPPSM MPGAVPGSGH PGVAGNAPLG LPFGMPPPPP PPAPSIIPFG SLADSISINL PAPPNLHGHH HHLPFAPGTL PPPNLPVSMA NPLHPNLPAT TTMPSSLPLG PGLGSAAAQS PAIVAAVQGN LLPSASPLPD PGTPLPPDPT APSPGTVTPV PPPQ

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 by multi-step, protein-specific process to ensure correct folding and modification.
- 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 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.

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!

Product Details

	Concentration: • 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. • We use the Expasy's ProtParam tool to determine the absorption coefficient of each protein.
Purification:	Two step purification of proteins expressed in Almost Living Cell-Free Expression System (ALiCE®): 1. In a first purification step, the protein is purified from the cleared cell lysate using StrepTag capture material. 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:	>80 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.
Endotoxin Level:	Low Endotoxin less than 1 EU/mg (< 0.1 ng/mg)
Grade:	Crystallography grade

Target Details

Target:	SMARCC2
Alternative Name:	SMARCC2 (SMARCC2 Products)
Background:	SWI/SNF complex subunit SMARCC2 (BRG1-associated factor 170) (BAF170) (SWI/SNF complex 170 kDa subunit) (SWI/SNF-related matrix-associated actin-dependent regulator of chromatin subfamily C member 2),FUNCTION: Involved in transcriptional activation and repression of select genes by chromatin remodeling (alteration of DNA-nucleosome topology). Component of SWI/SNF chromatin remodeling complexes that carry out key enzymatic activities, changing chromatin structure by altering DNA-histone contacts within a nucleosome in an ATP-dependent manner (PubMed:11018012). Can stimulate the ATPase activity of the catalytic subunit of these complexes (PubMed:10078207). May be required for CoREST dependent repression of neuronal specific gene promoters in non-neuronal cells (PubMed:12192000). 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 postmitotic chromatin remodeling mechanism occurs as neurons exit the cell cycle and become committed to their

Target Details

	adult state. The transition from proliferating neural stem/progenitor cells to postmitotic 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). Critical regulator of myeloid differentiation, controlling granulocytopoiesis and the expression of genes involved in neutrophil granule formation (By similarity). {ECO:0000250|UniProtKB:Q6PDG5, ECO:0000269|PubMed:10078207, ECO:0000269|PubMed:11018012, ECO:0000269|PubMed:12192000, ECO:0000303|PubMed:22952240, ECO:0000303|PubMed:26601204}.
Molecular Weight:	132.9 kDa
UniProt:	Q8TAQ2

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. If you have a special request, please contact us.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	Unlimited (if stored properly)

Images

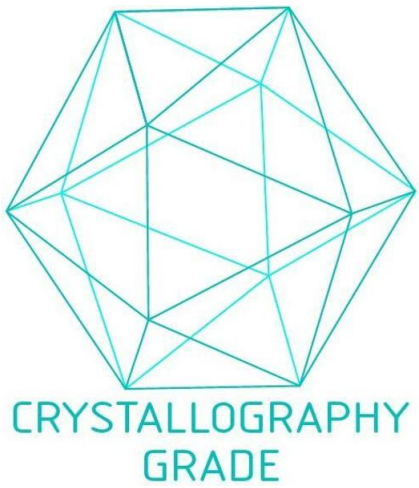

Image 1. „Crystallography Grade“ protein due to multi-step, protein-specific purification process