Datasheet for ABIN3093410

SUV420H1 Protein (AA 1-885) (Strep Tag)

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Overview

Quantity:	1 mg
Target:	SUV420H1
Protein Characteristics:	AA 1-885
Origin:	Human
Source:	Tobacco (Nicotiana tabacum)
Protein Type:	Recombinant
Purification tag / Conjugate:	This SUV420H1 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Sequence:	MKWLGESKNM VVNGRRNGGK LSNDHQQNQS KLQHTGKDTL KAGKNAVERR SNRCNGNSGF EGQSRYVPSS GMSAKELCEN DDLATSLVLD PYLGFQTHKM NTSAFPSRSS RHFSKSDSFS HNNPVRFRPI KGRQEELKEV IERFKKDEHL EKAFKCLTSG EWARHYFLNK NKMQEKLFKE HVFIYLRMFA TDSGFEILPC NRYSSEQNGA KIVATKEWKR NDKIELLVGC IAELSEIEEN MLLRHGENDF SVMYSTRKNC AQLWLGPAAF INHDCRPNCK FVSTGRDTAC VKALRDIEPG EEISCYYGDG FFGENNEFCE CYTCERRGTG AFKSRVGLPA PAPVINSKYG LRETDKRLNR LKKLGDSSKN SDSQSVSSNT DADTTQEKNN ATSNRKSSVG VKKNSKSRTL TRQSMSRIPA SSNSTSSKLT HINNSRVPKK LKKPAKPLLS KIKLRNHCKR LEQKNASRKL EMGNLVLKEP KVVLYKNLPI KKDKEPEGPA QAAVASGCLT RHAAREHRQN PVRGAHSQGE SSPCTYITRR SVRTRTNLKE ASDIKLEPNT LNGYKSSVTE PCPDSGEQLQ PAPVLQEEEL AHETAQKGEA KCHKSDTGMS KKKSRQGKLV KQFAKIEEST PVHDSPGKDD AVPDLMGPHS DQGEHSGTVG VPVSYTDCAP SPVGCSVVTS DSFKTKDSFR TAKSKKKRRI TRYDAQLILE NNSGIPKLTL

RRRHDSSSKT NDQENDGMNS SKISIKLSKD HDNDNNLYVA KLNNGFNSGS GSSSTKLKIQ LKRDEENRGS YTEGLHENGV CCSDPLSLLE SRMEVDDYSQ YEEESTDDSS SSEGDEEEDD YDDDFEDDFI PLPPAKRLRL IVGKDSIDID ISSRRREDQS LRLNA

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!

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.

Product Details

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)

Target Details

Target:	SUV420H1
Alternative Name:	KMT5B (SUV420H1 Products)
Background:	Histone-lysine N-methyltransferase KMT5B (Lysine N-methyltransferase 5B) (Lysine-specific methyltransferase 5B) (Suppressor of variegation 4-20 homolog 1) (Su(var)4-20 homolog 1) (Suv4-20h1) ([histone H4]-N-methyl-L-lysine20 N-methyltransferase KMT5B) (EC 2.1.1.362) ([histone H4]-lysine20 N-methyltransferase KMT5B) (EC 2.1.1.361),FUNCTION: Histone methyltransferase that specifically methylates monomethylated 'Lys-20' (H4K20me1) and dimethylated 'Lys-20' (H4K20me2) of histone H4 to produce respectively dimethylated 'Lys-20' (H4K20me2) and trimethylated 'Lys-20' (H4K20me3) and thus regulates transcription and maintenance of genome integrity (PubMed:24396869, PubMed:28114273). In vitro also methylates unmodified 'Lys-20' (H4K20me0) of histone H4 and nucleosomes (PubMed:24396869). H4 'Lys-20' trimethylation represents a specific tag for epigenetic transcriptional repression. Mainly functions in pericentric heterochromatin regions, thereby playing a central role in the establishment of constitutive heterochromatin in these regions. KMT5B is targeted to histone H3 via its interaction with RB1 family proteins (RB1, RBL1 and RBL2) (By similarity). Plays a role in myogenesis by regulating the expression of target genes, such as EID3 (PubMed:23720823). Facilitates TP53BP1 foci formation upon DNA damage and proficient non-homologous end-joining (NHEJ)-directed DNA repair by catalyzing the di- and trimethylation of 'Lys-20' of histone H4 (PubMed:28114273). May play a role in class switch reconbination by catalyzing the di- and trimethylation of 'Lys-20' of histone H4 (By similarity). {ECO:0000250|UniProtKB:Q3U8K7, ECO:0000269|PubMed:23720823, ECO:0000269|PubMed:24396869, ECO:0000269|PubMed:28114273}.
Molecular Weight:	99.2 kDa

Target Details

UniProt:	Q4FZB7

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)