

# Datasheet for ABIN7554334 SUV420H1 Protein (AA 1-885) (His tag)



## Overview

Quantity:	1 mg
Target:	SUV420H1
Protein Characteristics:	AA 1-885
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This SUV420H1 protein is labelled with His tag.

## **Product Details**

Purpose:	Custom-made recombinant KMT5B Protein expressed in mammalian cells.
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 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.
Specificity:	If you are looking for a specific domain and are interested in a partial protein or a different
	isoform, please contact us regarding an individual offer.
Characteristics:	Key Benefits:
	<ul> <li>Made to order protein - from design to production - by highly experienced protein experts.</li> <li>Protein expressed in mammalian cells and purified in one-step affinity chromatography</li> <li>The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins.</li> <li>State-of-the-art algorithm used for plasmid design (Gene synthesis).</li> </ul>
	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, anti-tag ELISA, Western Blot and analytical SEC (HPLC)
Grade:	custom-made
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

UniProt: Q4FZB7

### **Application Details**

Application Notes: We expect the protein to work for functional studies. 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