

Datasheet for ABIN7558093 SUV420H2/KMT5C Protein (AA 1-468) (His tag)



Overview

Quantity:	1 mg
Target:	SUV420H2/KMT5C (SUV420H2)
Protein Characteristics:	AA 1-468
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This SUV420H2/KMT5C protein is labelled with His tag.

Purpose:	Custom-made recombinant Kmt5c Protein expressed in mammalian cells.
Sequence:	MGPDRVTARE LCENDDLATS LVLDPYLGFR THKMNVSPVP TLRRQHHLRS ALEAFLRQRD
	LEAAFRALTL GGWMAHYFQS RAPRQEAALK THIFCYLRAF LPESGFTILP CTRYSMETNG
	AKIVSTRAWK KNEKLELLVG CIAELREEDE DLLRAGENDF SIMYSTRKRS AQLWLGPAAF
	INHDCKPNCK FVPSDGNTAC VKVLRDIEPG DEVTCFYGEG FFGEKNEHCE CYTCERKGEG
	AFRLQPREPE LRPKPLDKYE LRETKRRLQQ GLVSSQQSLM SRWACSHLSP LRPDPFCAAC
	QPSCLLPASP HMDYLPLWLQ RAPQPQPIVP PRKRHRRRRP RIRQASLPPV LRTACVPLHR
	WGGCGPHCQL RAEAMVTLHL RPQTRWTPQQ DWYWARRYGL PSVGRVELTR LAPALPAAPA
	PAGNPGPVPT PDFIPKQALA FAPFCPPKRL RLVVSHGSID LDINSGEP 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.

isoform, please contact us regarding an individual offer. 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. > 90 % as determined by Bis-Tris PAGE, anti-tag ELISA, Western Blot and analytical SEC (HPLC) Purity: Grade: custom-made **Target Details** SUV420H2/KMT5C (SUV420H2) Target: Alternative Name: Kmt5c (SUV420H2 Products) Background: Histone-lysine N-methyltransferase KMT5C (Lysine-specific methyltransferase 5C) (Suppressor of variegation 4-20 homolog 2) (Su(var)4-20 homolog 2) (Suv4-20h2) ([histone H4]-N-methyl-Llysine20 N-methyltransferase KMT5B) (EC 2.1.1.362) ([histone H4]-lysine20 Nmethyltransferase 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:15145825, PubMed:28114273). In vitro also methylates unmodified 'Lys-20' (H4K20me0) of histone H4 and nucleosomes (By similarity). H4 'Lys-20' trimethylation represents a specific tag for epigenetic transcriptional repression (PubMed:15145825). Mainly

functions in pericentric heterochromatin regions, thereby playing a central role in the

establishment of constitutive heterochromatin in these regions (PubMed:15145825). KMT5B is

targeted to histone H3 via its interaction with RB1 family proteins (RB1, RBL1 and RBL2) (PubMed:15750587, PubMed:16612004). 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 (By similarity). May play a role in class switch reconbination by catalyzing the di- and trimethylation of 'Lys-20' of histone H4 (PubMed:28114273). {ECO:0000250|UniProtKB:Q86Y97, ECO:0000269|PubMed:15145825, ECO:0000269|PubMed:15750587, ECO:0000269|PubMed:16612004, ECO:0000269|PubMed:28114273}.

Molecular Weight:

53.2 kDa

UniProt:

Q6Q783

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