

Datasheet for ABIN7564068 PRMT6 Protein (AA 1-378) (His tag)



Overview

Quantity:	1 mg
Target:	PRMT6
Protein Characteristics:	AA 1-378
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This PRMT6 protein is labelled with His tag.

Product Details

Purpose:	Custom-made recombinant Prmt6 Protein expressed in mammalian cells.
Sequence:	MSLSKKRKLE SGDSGGAGAG GEGAEEENGG EQEAAPPRPR RTKSERDQLY YECYSDVSVH
	EEMIADQVRT EAYRLGILKN WAALRGKTVL DVGAGTGILS IFCAQAGARR VYAVEASAIW
	QQAREVVRLN GLEDRVHVLP GPVETVELPE RVDAIVSEWM GYGLLHESML SSVLHARTKW
	LKEGGLLLPA SAELFVAPIS DQMLEWRLGF WSQVKQHYGV DMSCMESFAT RCLMGHSEIV
	VQDLSGEDVL ARPQRFAQLE LARAGLEQEL EAGVGGRFRC SCYGSAPLHG FAVWFQVTFP
	GGDSEKPLVL STSPFHPATH WKQALLYLNE PVPVEQDTDI SGEITLLPSP DNPRRLRILL
	RYKVGDHEEK TKDFAMED 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:

- · 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.

Purity:

> 90 % as determined by Bis-Tris PAGE, anti-tag ELISA, Western Blot and analytical SEC (HPLC)

Grade:

custom-made

Target Details

Target:	PRMT6
Alternative Name:	Prmt6 (PRMT6 Products)

Background:

Protein arginine N-methyltransferase 6 (EC 2.1.1.319) (Histone-arginine N-methyltransferase PRMT6),FUNCTION: Arginine methyltransferase that can catalyze the formation of both omega-N monomethylarginine (MMA) and asymmetrical dimethylarginine (aDMA), with a strong preference for the formation of aDMA (PubMed:22904064, PubMed:26070566). Preferentially methylates arginyl residues present in a glycine and arginine-rich domain and displays preference for monomethylated substrates (By similarity). Specifically mediates the asymmetric dimethylation of histone H3 'Arg-2' to form H3R2me2a (By similarity). H3R2me2a represents a specific tag for epigenetic transcriptional repression and is mutually exclusive with methylation on histone H3 'Lys-4' (H3K4me2 and H3K4me3) (By similarity). Acts as a transcriptional repressor of various genes such as HOXA2, THBS1 and TP53 (PubMed:22904064). Repression of TP53 blocks cellular senescence (PubMed:22904064). Also methylates histone H2A and H4 'Arg-3' (H2AR3me and H4R3me, respectively) (By similarity). Acts as a regulator of DNA base excision during DNA repair by mediating the methylation of DNA polymerase beta (POLB), leading to the stimulation of its polymerase activity by enhancing

DNA binding and processivity (By similarity). Methylates HMGA1 (By similarity). Regulates alternative splicing events (By similarity). Acts as a transcriptional coactivator of a number of steroid hormone receptors including ESR1, ESR2, PGR and NR3C1 (By similarity). Promotes fasting-induced transcriptional activation of the gluconeogenic program through methylation of the CRTC2 transcription coactivator (PubMed:24570487). Methylates GPS2, protecting GPS2 from ubiquitination and degradation (PubMed:26070566). Methylates SIRT7, inhibiting SIRT7 histone deacetylase activity and promoting mitochondria biogenesis (By similarity). {ECO:0000250|UniProtKB:Q96LA8, ECO:0000269|PubMed:22904064, ECO:0000269|PubMed:24570487, ECO:0000269|PubMed:26070566}.

Molecular Weight:

41.9 kDa

UniProt:

Q6NZB1

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