

# Datasheet for ABIN7565268 **EHMT2 Protein (AA 1-1263) (His tag)**



### Overview

Quantity:	1 mg
Target:	EHMT2
Protein Characteristics:	AA 1-1263
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This EHMT2 protein is labelled with His tag.
Application:	SDS-PAGE (SDS), Western Blotting (WB)

Product Details	
Purpose:	Custom-made recombinat Ehmt2 Protein expressed in mammalien cells.
Sequence:	MRGLPRGRGL MRARGRGRAA PTGGRGRGRG GAHRGRGRPR SLLSLPRAQA SWAPQLPAGL
	TGPPVPCLPS QGEAPAEMGA LLLEKEPRGA AERVHSSLGD TPQSEETLPK ANPDSLEPAG
	PSSPASVTVT VGDEGADTPV GAASLIGDEP ESLEGDGGRI VLGHATKSFP SSPSKGGACP
	SRAKMSMTGA GKSPPSVQSL AMRLLSMPGA QGAATAGPEP SPATTAAQEG QPKVHRARKT
	MSKPSNGQPP IPEKRPPEVQ HFRMSDDMHL GKVTSDVAKR RKLNSGSLSE DLGSAGGSGD
	IILEKGEPRP LEEWETVVGD DFSLYYDAYS VDERVDSDSK SEVEALAEQL SEEEEEEEE
	EEEEEEEEE EEEEEDEES GNQSDRSGSS GRRKAKKKWR KDSPWVKPSR KRRKREPPRA
	KEPRGVNGVG SSGPSEYMEV PLGSLELPSE GTLSPNHAGV SNDTSSLETE RGFEELPLCS
	CRMEAPKIDR ISERAGHKCM ATESVDGELL GCNAAILKRE TMRPSSRVAL MVLCEAHRAR
	MVKHHCCPGC GYFCTAGTFL ECHPDFRVAH RFHKACVSQL NGMVFCPHCG EDASEAQEVT
	IPRGDGGTPP IGTAAPALPP LAHDAPGRAD TSQPSARMRG HGEPRRPPCD PLADTIDSSG

PSLTLPNGGC LSAVGLPPGP GREALEKALV IQESERRKKL RFHPRQLYLS VKQGELQKVI
LMLLDNLDPN FQSDQQSKRT PLHAAAQKGS VEICHVLLQA GANINAVDKQ QRTPLMEAVV
NNHLEVARYM VQLGGCVYSK EEDGSTCLHH AAKIGNLEMV SLLLSTGQVD VNAQDSGGWT
PIIWAAEHKH IDVIRMLLTR GADVTLTDNE ENICLHWASF TGSAAIAEVL LNAQCDLHAV
NYHGDTPLHI AARESYHDCV LLFLSRGANP ELRNKEGDTA WDLTPERSDV WFALQLNRKL
RLGVGNRAVR TEKIICRDVA RGYENVPIPC VNGVDGEPCP EDYKYISENC ETSTMNIDRN
ITHLQHCTCV DDCSSSNCLC GQLSIRCWYD KDGRLLQEFN KIEPPLIFEC NQACSCWRSC
KNRVVQSGIK VRLQLYRTAK MGWGVRALQT IPQGTFICEY VGELISDAEA DVREDDSYLF
DLDNKDGEVY CIDARYYGNI SRFINHLCDP NIIPVRVFML HQDLRFPRIA FFSSRDIRTG
EELGFDYGDR FWDIKSKYFT CQCGSEKCKH SAEAIALEQS RLARLDPHPE LLPDLSSLPP INT

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.

#### Characteristics:

Key Benefits:

- Made to order protein from design to production by highly experienced protein experts.
- · Protein expressed in mammalien 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, Western Blot

Grade:

custom-made

#### **Target Details**

Target: EHMT2

Alternative Name: Ehmt2 (EHMT2 Products)

Background:

Histone-lysine N-methyltransferase EHMT2 (EC 2.1.1.-) (EC 2.1.1.367) (Euchromatic histonelysine N-methyltransferase 2) (HLA-B-associated transcript 8) (Histone H3-K9 methyltransferase 3) (H3-K9-HMTase 3) (Protein G9a), FUNCTION: Histone methyltransferase that specifically mono- and dimethylates 'Lys-9' of histone H3 (H3K9me1 and H3K9me2, respectively) in euchromatin. H3K9me represents a specific tag for epigenetic transcriptional repression by recruiting HP1 proteins to methylated histones. Also mediates monomethylation of 'Lys-56' of histone H3 (H3K56me1) in G1 phase, leading to promote interaction between histone H3 and PCNA and regulating DNA replication. Also weakly methylates 'Lys-27' of histone H3 (H3K27me). Also required for DNA methylation, the histone methyltransferase activity is not required for DNA methylation, suggesting that these 2 activities function independently. Probably targeted to histone H3 by different DNA-binding proteins like E2F6, MGA, MAX and/or DP1. May also methylate histone H1. In addition to the histone methyltransferase activity, also methylates non-histone proteins: mediates dimethylation of 'Lys-373' of p53/TP53. Also methylates CDYL, WIZ, ACIN1, DNMT1, HDAC1, ERCC6, KLF12 and itself. Recruited to the promoters of target genes through interaction with transcriptional repressor MSX1, leading to the inhibition of myoblast differentiation via transcriptional repression of differentiation factors (PubMed:22629437). {ECO:0000269|PubMed:12130538, ECO:0000269|PubMed:15774718, ECO:0000269|PubMed:18818694, ECO:0000269|PubMed:22387026, ECO:0000269|PubMed:22629437}.

Molecular Weight:

138.0 kDa

UniProt:

Q9Z148

#### **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.

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

## Handling

Storage Comment:	Store at -80°C.	
Expiry Date:	12 months	