

Datasheet for ABIN7565087
PRMT1 Protein (AA 1-371) (His tag)



[Go to Product page](#)

Overview

Quantity:	1 mg
Target:	PRMT1
Protein Characteristics:	AA 1-371
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This PRMT1 protein is labelled with His tag.
Application:	SDS-PAGE (SDS), Western Blotting (WB)

Product Details

Purpose:	Custom-made recombinat Prmt1 Protein expressed in mammalien cells.
Sequence:	<p>MAAAEAANCI MENFVATLAN GMSLQPPLLE VSCGQAESSE KPNAEDMTSK DYYFDSYAHF GIHEEMLKDE VRTLTYRNSM FHNRLFKDK VLDVGSSTG ILCMFAAKAG ARKVGIECS SISDYAVKIV KANKLDHVVT IIKGKVEEVE LPVEKVDIII SEWMGYCLFY ESMLNTVLHA RDKWLAPDGL IFPDRATLYV TAIEDRQYKD YKIHWWENVY GFDMSCIKDV AIKEPLVDVV DPKQLVTNAC LIKEVDIYTV KVEDLTFTSP FCLQVKRNDY VHALVAYFNI EFTRCHKRTG FSTSPESPYT HWKQTVFYME DYLTVKTGEE IFGTIGMRPN AKNNRDLDFE IDLDFKGQLC ELSCSTDYRM R 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.</p>
Characteristics:	Key Benefits:

Product Details

- 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, Western Blot

Grade: custom-made

Target Details

Target: PRMT1

Alternative Name: Prmt1 ([PRMT1 Products](#))

Background: Protein arginine N-methyltransferase 1 (EC 2.1.1.319) (Histone-arginine N-methyltransferase PRMT1),FUNCTION: Arginine methyltransferase that methylates (mono and asymmetric dimethylation) the guanidino nitrogens of arginyl residues present in proteins such as ESR1, histone H2, H3 and H4, FMR1, ILF3, HNRNPA1, HNRNPD, NFATC2IP, SUPT5H, TAF15, EWS, HABP4, SERBP1, RBM15, FOXO1, CHTOP, MAP3K5/ASK1 and NPRL2 (PubMed:15327772, PubMed:19858291, PubMed:38006878). Constitutes the main enzyme that mediates monomethylation and asymmetric dimethylation of histone H4 'Arg-4' (H4R3me1 and H4R3me2a, respectively), a specific tag for epigenetic transcriptional activation (By similarity). May be involved in the regulation of TAF15 transcriptional activity, act as an activator of estrogen receptor (ER)-mediated transactivation, play a key role in neurite outgrowth and act as a negative regulator of megakaryocytic differentiation, by modulating p38 MAPK pathway (By similarity). Methylates RBM15, promoting ubiquitination and degradation of RBM15 (By similarity). Methylates FOXO1 and retains it in the nucleus increasing its transcriptional activity. Methylates CHTOP and this methylation is critical for its 5-hydroxymethylcytosine (5hmC)-

Target Details

binding activity (PubMed:19858291). Methylates MAP3K5/ASK1 at 'Arg-85' and 'Arg-87' which promotes association of MAP3K5 with thioredoxin and negatively regulates MAP3K5 association with TRAF2, inhibiting MAP3K5 stimulation and MAP3K5-induced activation of JNK (By similarity). Methylates H4R3 in genes involved in glioblastomagenesis in a CHTOP- and/or TET1-dependent manner (By similarity). Plays a role in regulating alternative splicing in the heart (PubMed:30321814). Methylates NPRL2 at 'Arg-78' leading to inhibition of its GTPase activator activity and then the GATOR1 complex and consequently inducing timely mTORC1 activation under methionine-sufficient conditions (PubMed:38006878).
{ECO:0000250|UniProtKB:Q99873, ECO:0000269|PubMed:15327772, ECO:0000269|PubMed:19858291, ECO:0000269|PubMed:30321814, ECO:0000269|PubMed:38006878}.

Molecular Weight: 42.4 kDa

UniProt: [Q9JIF0](#)

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

Storage Comment: Store at -80°C.

Expiry Date: 12 months