

# Recombinant mouse PRMT1 protein

Catalog Number: PRM0801

## PRODUCT INFORMATION

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### Expression system

E.coli

### Domain

1-353aa

### UniProt No.

Q9JIF0

### NCBI Accession No.

NP\_001239405.1

### Alternative Names

Protein arginine N-methyltransferase 1 isoform 2, Histone-arginine N-methyltransferase PRMT1, Heterogeneous nuclear ribonucleoproteins methyltransferase-like 2, Hrmt1l2, Mrmt1

## PRODUCT SPECIFICATION

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### Molecular Weight

84 kDa (750aa)

### Concentration

1mg/ml (determined by Bradford assay)

### Formulation

Liquid in. 40mM Tris-HCl buffer (pH 8.0) containing 100mM NaCl, 4mM MgCl<sub>2</sub>, 2mM DTT, 40% glycerol

### Purity

> 90% by SDS-PAGE

### Biological Activity

Specific activity is > 30nmol/min/mg, and is defined as the amount of enzyme that transfer 1.0nmole of methyl group per minute at 37C.

### Tag

His-MBP-Tag

### Application

SDS-PAGE, Enzyme Activity

### Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

## BACKGROUND

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### Description

Protein arginine N-methyltransferase 1 (PRMT1) is a type I methyltransferase that transfers a methyl group from S-adenosylmethionine to guanidino nitrogens of arginine residues to form monomethylarginine and asymmetric

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dimethylarginine. Functions of type I arginine methylation in proteins may include regulation of transcription, modulation of the affinity of nucleic acid-binding proteins, regulation of interferon signaling pathways, and targeting of nuclear proteins. Mouse PRMT1 (AAF37293) shares 99.9% sequence identity with the human proteins (NP\_938074). Recombinant mouse PRMT1, fused to His-MBP tag at N-terminus, was expressed in *E. coli* and purified by using conventional chromatography techniques.

## Amino acid Sequence

MHHHHHMKI EEGKLVWIN GDKGYNGLAE VGKKFEKDTG IKVTVHEHPDK LEEKFPQVAA TGDGPDIIW AHDRFGGYAQ  
 SGLLAEITPD KAFQDKLYPF TWDVRYNGK LIAYPIAVEA LSLIYNKDLL PNPPKTWEEI PALDKELKAK GKSALMFNLQ  
 EPYFTWPLIA ADGGYAFKYE NGKYDIKDVG VDNAGAKAGL TFLVDLIK NK HMNADTDYSI AEA AFNKGET AMTINGPWAW  
 SNIDTSKVNY GVTVLPTFKG QPSKPFVGV L SAGINAASPN KELA KEFLEN YLLTDEGLEA VNKDKPLGAV ALKSYEEELA  
 KDPRIAATME NAQKGEIMPN IPQMSAFWYA VRTAVINAAS GRQTVDEALK DAQTNSSSN NNNNNNNNLG IEGRGSHMAA  
 AEAANCIMEV SCGQAESSEK PNAEDMTSKD YFDSYAHFG IHEEMLKDEV RLTLYRNSMF HNRHLFKDKV VLDVGS GTGI  
 LCMFAAKAGA RKVIGIECSS ISDYAVKIVK ANKLDHVVTI IKGKVEEVEL PVEKVDIIS EWMGYCLFYE SMLNTVLHAR  
 DKWLAPDGLI FPDRATLYVT AIEDRQYKDY KIHWWENVY G FDMSCIKDVA IKEPLVDVVD PKQLVTNA CL IKEVDIYTVK  
 VEDLTFTSPF CLQVKRNDYV HALVAYFNIE FTRCHKRTGF STSPESPYTH WKQTVFYMED YLTVKTGEEI FGTIGMRPNA  
 KNNRDLFTI DLDFKQLCE LSCSTDYRMR

## General References

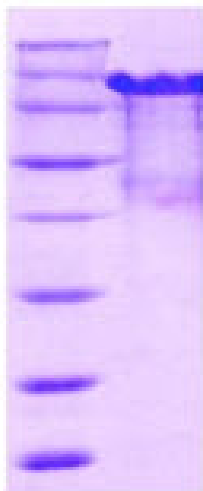
Herrmann F., et al. (2005). *J Biol Chem.* 280(45):38005-10.  
 Abramovich C., et al. (1997). *EMBO J.* 16(2):260-6.

## DATA

### SDS-PAGE

(kDa)

150  
 100  
 70  
 50  
 35  
 25  
 20  
 15



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.

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 15% SDS-PAGE (3ug)