

Recombinant mouse PRMT1 protein

Catalog Number: PRM0801

PRODUCT INFORMATION

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

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 MgCl₂, 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

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 RTLTYRNSMF HNRHLFKDKV VLDVGS GTGI
 LCMFAAKAGA RKVIGIECSS ISDYAVKIVK ANKLDHVVTI IKGKVEEVEL PVEKVDIIS EWMGYCLFYE SMLNTVLHAR
 DKWLAPDGLI FPDRATLYVT AIEDRQYKDY KIHWWENVY G FDMSCIKDVA IKEPLVDVVD PKQLVTNA CL IKEVDIYTVK
 VEDLTF TSPF CLQVKRNDYV HALVAYFNIE FTRCHKRTGF STSPESPYTH WKQTVFYMED YLTVKTGEEI FGTIGMRPNA
 KNNRDLFTI DLDFKGLCE LSCSTDYRMR

General References

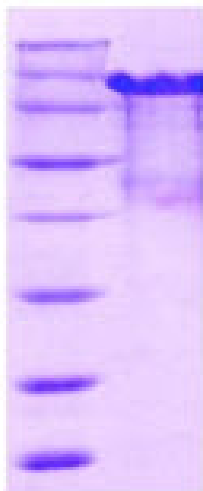
Herrmann F., et al. (2005). *J Biol Chem.* 280(45):38005-10.
 Abramovich C., et al. (1997). *EMBO J.* 16(2):260-6.

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.

 15% SDS-PAGE (3ug)