

PRMT5 recombinant protein

Recombinant PRMT5 protein

CATALOG # AAA59657	HOST Baculovirus
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PRODUCT SYNONYMS

PRMT5; Recombinant PRMT5 protein; Protein Arginine Methyltransferase 5; JBP1; SKB1; IBP72; SKB1Hs; HRMT1L5; PRMT5 recombinant protein

PRODUCT SPECIFICATIONS

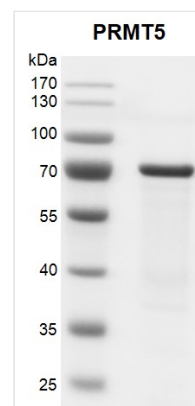
Host	Baculovirus
Purity/Purification	The recombinant protein is >90% pure by SDS-PAGE.
Form/Format	Recombinant PRMT5 protein is supplied in 25mM HEPES pH7.5, 300mM NaCl, 10% glycerol, 0.04% Triton X-100, and 0.5mM TCEP.
Protein Species	Human
Tag	DYKDDDDK-Tag
Notes	Recombinant PRMT5 is suitable for use in the study of enzyme kinetics, inhibitor screening, and selectivity profiling. PRMT5 is an active H3R8 and H4R3 methyltransferase. HMT Assay Conditions: 0.25ug of Histone H4 was incubated with 0ug, 0.075ug, 0.15ug, and 0.3ug PRMT5 protein in a 30ul reaction system containing 50mM Tris-HCl pH 8.6, 0.02% Triton X-100, 2mM MgCl ₂ , 1mM TCEP, 50uM SAM for 3 hr at room temperature. Reaction products were run on a 12.5% SDS-PAGE and detected by H4R3me2s antibody. PRMT5 only was used as negative control. Western Blot was used for activity detection.
Dry Ice Note	The product may be shipped with dry ice, and an additional fee may be added to your shipping cost.
Preparation and Storage	Recombinant proteins in solution are temperature sensitive and must be stored at -80 degree C to prevent degradation. Avoid repeated freeze/thaw cycles and keep on ice when not in storage. Shipping Temp: Dry Ice

IMAGES



WB (Western Blot)

HMT assay for recombinant PRMT5 protein activity. 0.25 ug of Histone H4 was incubated with 0 ug, 0.075 ug, 0.15 ug, and 0.3 ug PRMT5 protein in a 30 ul reaction system containing 50 mM Tris-HCl pH 8.6, 0.02% Triton X-100, 2 mM MgCl₂, 1 mM TCEP, 50 uM SAM for 3 hr at room temperature. Reaction products were run on a 12.5% SDS-PAGE and detected by H4R3me2s antibody. PRMT5 only was used as negative control. Western Blot was used for activity detection.



SDS-PAGE

Recombinant PRMT5 protein gel. PRMT5 protein was run on a 10% SDS-PAGE gel and stained with Coomassie Blue. MW: 74 kDa Purity: > 90%

ADDITIONAL INFORMATION

Related Product Information for PRMT5 recombinant protein	Short Description: Recombinant PRMT5 (accession number NP_006100.2) was expressed in Sf9 cells and contains an N-terminal DYKDDDDK tag with an observed molecular weight of 74.2 kDa. PRMT5 (Protein Arginine Methyltransferase 5, also known as JBP1, Janus Binding Protein 1) is a type II arginine methyltransferase, a protein that transfers methyl groups to the arginine residues of substrate proteins. Arginine methylation is a common post-translational modification of histones and other cellular proteins. PRMT5 symmetrically dimethylates histone H2A Arg3, H3 Arg8 and H4 Arg3. It also methylates Piwi proteins which regulate small non-coding RNAs and snRNPs, regulating snRNP core particle assembly. PRMT5 functions as a co-repressor of transcription and is recruited by a number of DNA binding proteins and transcriptional repressor complexes. It is present both in the nucleus and the cytoplasm. It also interacts with COPR5, JAK2, PRDM1 and RPS10. Recombinant PRMT5 can be used to study enzyme kinetics and perform inhibitor screening assays. Background: PRMT5 (Protein Arginine Methyltransferase 5, also known as JBP1, Janus Binding Protein 1) is a type II arginine methyltransferase, a protein that transfers methyl groups to the arginine residues of substrate proteins. Arginine methylation is a common post-translational modification of histones and other cellular proteins. PRMT5 symmetrically dimethylates histone H2A Arg3, H3 Arg8 and H4 Arg3. It also methylates Piwi proteins which regulate small non-coding RNAs and snRNPs, regulating snRNP core particle assembly. PRMT5 functions as a co-repressor of transcription and is recruited by a number of DNA binding proteins and transcriptional repressor complexes. It is present both in the nucleus and the cytoplasm. It also interacts with COPR5, JAK2, PRDM1 and RPS10.
Product Categories/Family for PRMT5 recombinant protein	Recombinant Proteins ; Histone Methyltransferase (HMT) ; Transcription

NCBI AND UNIPROT INFORMATION

NCBI GI #	20070220
NCBI GeneID	10419
NCBI Accession #	NP_006100.2
NCBI GenBank Nucleotide #	NM_006109.4
UniProt Accession #	O14744; Q6IBR1; Q9UKH1; A8MTP3; A8MZ91; B4DX49; B4DY30; B5BU10; D3DS33; E2QRE7
Molecular Weight	66,311 Da
NCBI Official Full Name	protein arginine N-methyltransferase 5 isoform a
NCBI Official Synonym Full Names	protein arginine methyltransferase 5
NCBI Official Symbol	PRMT5
NCBI Official Synonym Symbols	JBP1; SKB1; IBP72; SKB1Hs; HRMT1L5
NCBI Protein Information	protein arginine N-methyltransferase 5; SKB1 homolog; jak-binding protein 1; 72 kDa ICln-binding protein; HMT1 hnRNP methyltransferase-like 5; shk1 kinase-binding protein 1 homolog; histone-arginine N-methyltransferase PRMT5
UniProt Protein Name	Protein arginine N-methyltransferase 5
UniProt Gene Name	PRMT5
UniProt Synonym Gene Names	HRMT1L5; IBP72; JBP1; SKB1; SKB1 homolog; SKB1Hs
UniProt Entry Name	ANM5_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.