

PRMT5/MEP50 recombinant protein

Recombinant PRMT5/MEP50 complex

CATALOG # AAA59732	HOST Baculovirus
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PRODUCT SYNONYMS

PRMT5/MEP50; Recombinant PRMT5/MEP50 complex; Protein Arginine Methyltransferase 5; JBP1; SKB1; IBP72; SKB1Hs; HRMT1L5; PRMT5/MEP50 recombinant protein

PRODUCT SPECIFICATIONS

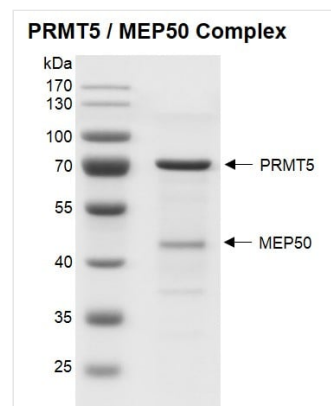
Host	Baculovirus
Form/Format	Recombinant PRMT5/MEP50 Complex is supplied at a concentration of 0.4ug/ul in 25mM HEPES pH7.5, 300mM NaCl, 10% glycerol, 0.04% Triton X-100, 0.5mM TCEP.
Protein Species	Human
Tag	DYKDDDDK-Tag
Notes	Recombinant PRMT5/MEP50 Complex is suitable for use in the study of enzyme kinetics, inhibitor screening, and selectivity profiling. HMT Assay Conditions: 0.5ug Histone H4 was incubated with different concentrations of PRMT5/MEP50 Complex in 30ul reaction system including 50mM Tris-HCl pH 8.6, 0.02% Triton X-100, 2mM MgCl ₂ , 1mM TCEP, and 50uM SAM for 3 hours at room temperature. Activity was detected by Western Blot.
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)

PRMT / MEP50 complex, Activity Assay 0.5 ug Histone H4 was incubated with 0 ug (-), 0.225 ug (+), 0.45 ug (++), or 0.9 ug (+++) PRMT5 / MEP50 complex in 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 hours at room temperature. 6 ul reaction products were loaded and run on a 12.5% SDS-PAGE gel. Western Blot was used to detect the generation of reaction products (H4R3me2s antibody). PRMT5 / MEP50 Complex only was used as negative control.



SDS-PAGE

Recombinant PRMT5 / MEP50 complex - protein gel. 10% SDS-PAGE gel stained with Coomassie blue. MW of PRMT5: 74 kDa MW of MEP50: 36.7 kDa Purity: > 90%

ADDITIONAL INFORMATION

Related Product Information for PRMT5/MEP50 recombinant protein	Short Description: Recombinant PRMT5/MEP50 complex includes full-length PRMT5 (accession numbers NP_006100.2) with an N-terminal DYKDDDDK tag and full-length MEP50 (accession numbers NP_077007.1) without a tag; it was expressed in a baculovirus expression system. The molecular weights of PRMT5 and MEP50 are 74 kDa and 36.7 kDa, respectively. It is suitable for use in the study of enzyme kinetics, inhibitor screening, and selectivity profiling. 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. PRMT5 acts as part of a multimeric complex in concert with a variety of partner proteins that regulate its function and specificity. A core component of these complexes is the WD40 protein MEP50/WDR77/p44, which mediates interactions with binding partners and substrates. PRMT5 is present both in the nucleus and the cytoplasm. It also interacts with COPR5, JAK2, PRDM1 and RPS10.
Product Categories/Family for PRMT5/MEP50 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.