



Human PRMT5 peptide (DAG-P1874)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Antigen Description

Arginine methyltransferase that can both catalyze the formation of omega-N monomethylarginine (MMA) and symmetrical dimethylarginine (sDMA), with a preference for the formation of MMA. Specifically mediates the symmetrical dimethylation of arginine residues in the small nuclear ribonucleoproteins Sm D1 (SNRPD1) and Sm D3 (SNRPD3); such methylation being required for the assembly and biogenesis of snRNP core particles. Methylates SUPT5H. Mono- and dimethylates arginine residues of myelin basic protein (MBP) in vitro. Plays a role in the assembly of snRNP core particles. May play a role in cytokine-activated transduction pathways. Negatively regulates cyclin E1 promoter activity and cellular proliferation. May regulate the SUPT5H transcriptional elongation properties. May be part of a pathway that is connected to a chloride current, possibly through cytoskeletal rearrangement. Methylates histone H2A and H4 'Arg-3' during germ cell development. Methylates histone H3 'Arg-8', which may repress transcription. Methylates the Piwi proteins (PIWIL1, PIWIL2 and PIWIL4), methylation of Piwi proteins being required for the interaction with Tudor domain-containing proteins and subsequent localization to the meiotic nuage. Methylates RPS10.

Specificity	Ubiquitous.
Conjugate	Unconjugated
Sequence Similarities	Belongs to the protein arginine N-methyltransferase family.
Format	Liquid
Preservative	None
Storage	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles. Information available upon request.

GENE INFORMATION

Gene Name [PRMT5 protein arginine methyltransferase 5 \[Homo sapiens \(human\) \]](#)

Official Symbol	PRMT5
Synonyms	PRMT5; protein arginine methyltransferase 5; JBP1; SKB1; IBP72; SKB1Hs; HRMT1L5; protein arginine N-methyltransferase 5; SKB1 homolog; jak-binding protein 1; 72 kDa ICIIn-binding protein; HMT1 hnRNP methyltransferase-like 5; shk1 kinase-binding protein 1 homolog; histone-arginine N-methyltransferase PRMT5;
Entrez Gene ID	10419
mRNA Refseq	NM_001039619.2
Protein Refseq	NP_001034708.1
UniProt ID	O14744
Chromosome Location	14q11.2
Pathway	E2F transcription factor network, organism-specific biosystem; Gene Expression, organism-specific biosystem; Metabolism of non-coding RNA, organism-specific biosystem; RNA transport, organism-specific biosystem; RNA transport, conserved biosystem; Signaling events mediated by HDAC Class I, organism-specific biosystem; p53 pathway, organism-specific biosystem; snRNP Assembly, organism-specific biosystem;
Function	chromatin binding; histone-arginine N-methyltransferase activity; methyltransferase activity; protein binding; protein-arginine omega-N symmetric methyltransferase activity; ribonucleoprotein complex binding;