

Recombinant Protein Technical Manual Recombinant Human PRMT5/SKB1 Protein (His & FLAG Tag)

Product Data:

Product SKU: RPES3858 **Size:** 20μg

Species: Human Expression host: HEK293 Cells

RPES3858

Uniprot: NP 006100.2

Protein Information:

Molecular Mass: 75 kDa

AP Molecular Mass: 65 kDa

Tag: C-His & N-FLAG

Bio-activity:

Purity: > 85 % as determined by reducing SDS-PAGE.

Endotoxin: $< 1.0 \text{ EU per } \mu\text{g}$ as determined by the LAL method.

Storage: Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C.

Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of

reconstituted samples are stable at < -20°C for 3 months.

Shipping: This product is provided as lyophilized powder which is shipped with ice packs.

Formulation: Lyophilized from sterile 50mM Tris, 100mM NaCl, pH 8.0, 0.5mM EDTA, 0.5PMSF,

0.5mM, TCEP, 25% glycerol

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: HRMT1L5;IBP72;JBP1;SKB1;SKB1Hs

Immunogen Information:

Sequence: Ala 2-Leu 637

Background:

Methylation of arginine residues is a widespread post-translational modification of proteins catalyzed by a small family of PRMTs. The modification appears to regulate protein functions and interactions that affect gene regulation, signalling and subcellular localization of proteins and nucleic acids. Protein arginine methyltransferase 5 (PRMT5) is a member of the protein arginine N-methyltransferases (PRMT)family, and exists as at least homodimers and homotetramers, or homooligomers mediated by disulfide bonds and non-covalent association ubiquitously. PRMT5 specifically mediates the symmetrical dimethylation of arginine residues in the small nuclear ribonucleoproteins Sm D1 (SNRPD1) and Sm D3 (SNRPD3), and thus plays a role in the assembly and biogenesis of snRNP core particles. PRMT5 methylates histone H2A and H4 'Arg-3' during germ cell development, as well as histone H3 'Arg-8', which may repress transcription. PRMT5 also methylates SUPT5H and regulates its transcriptional elongation properties. Additionally, it is also suggested that PRMT5 negatively regulates cyclin E1 promoter activity and cellular proliferation.