



Recombinant Protein Technical Manual  
Recombinant Human PRMT6/HRMT1L6 Protein (His  
& FLAG Tag)  
RPES2034

Product Data:

**Product SKU:** RPES2034

**Size:** 20µg

**Species:** Human

**Expression host:** HEK293 Cells

**Uniprot:** NP\_060607.2

Protein Information:

**Molecular Mass:** 44.4 kDa

**AP Molecular Mass:** 43-46 kDa

**Tag:** C-His & N-FLAG

**Bio-activity:**

**Purity:** > 95 % as determined by reducing SDS-PAGE.

**Endotoxin:** < 1.0 EU per µg 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 PBS, pH 7.5

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

**Application:**

**Synonyms:** HRMT1L6

## Immunogen Information:

**Sequence:** Met 1-Asp 375

## Background:

Protein arginine N-methyltransferase 6, also known as Histone-arginine N-methyltransferase PRMT6, PRMT6, and HRMT1L6, is a member of the protein arginine N-methyltransferase family and PRMT6 subfamily. PRMT6 is highly expressed in kidney and testes. PRMT6 is known to catalyze the generation of asymmetric dimethylarginine in polypeptides. It has been implicated in human immunodeficiency virus pathogenesis, DNA repair, and transcriptional regulation. PRMT6 is known to methylate histone H3 Arg-2 (H3R2), and this negatively regulates the lysine methylation of H3K4 resulting in gene repression. PRMT6 plays a key role in coupling process by functioning as a transcriptional coactivator that can regulate alternative splicing. PRMT6 coactivates the progesterone, glucocorticoid and oestrogen receptors in luciferase reporter assays in a hormone-dependent manner. Small interfering RNA (siRNA) oligonucleotide duplex knockdown of PRMT6 disrupts oestrogen-stimulated transcription of endogenous GREB1 and progesterone receptor in MCF-7 breast cancer cells. Neutralizing the activity of PRMT6 could inhibit tumor progression and may be of cancer therapeutic significance.