

PRMT6 (GST)

(Protein Arginine Methyltransferase 6)

CATALOG NO.: HMT-11-121

LOT NO.:

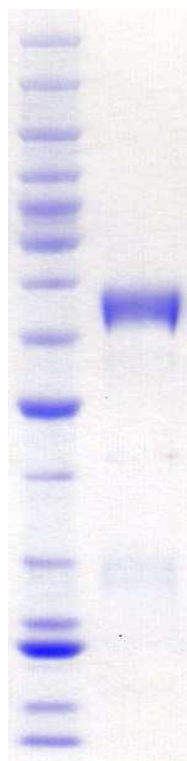
DESCRIPTION: Full-length human recombinant PRMT6 expressed in *E.coli* (residues 2-375); Genbank Accession # NM_018137; N-terminal GST-tag; MW = 67.8 kDa). PRMT6, a type I arginine methyltransferase, catalyzes the transfer of a methyl group from S-adenosyl-L-methionine (SAM) to an ω -nitrogen of the guanidino function of protein L-arginine residues and the transfer of a second methyl group to the same nitrogen, yielding asymmetric dimethylarginine (aDMA). PRMT6 methylates Arg-2 of histone H3 (H3R2), promoting transcriptional repression.

PURITY: >90% by SDS-PAGE.

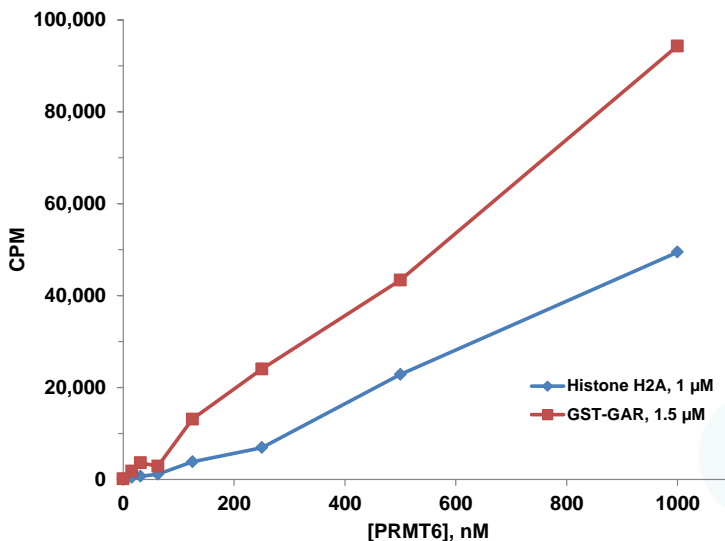
ASSAY CONDITIONS: RBC's PRMT6 displays substantial methyltransferase activity from [³H]-SAM to GST-GAR (Cat. #HMT-11-137) and histone H2A (Cat. #HMT-11-146; see Figure, below). Activity was determined as TCA-precipitated counts in a scintillation/filter plate assay (Multiscreen FB, Topcount). Reaction conditions: 50 mM Tris-HCl, pH 8.5, 50 mM NaCl, 5 mM MgCl₂, 1 mM DTT, 1 mM PMSF, 30°C, 60 min. with 1 μ M [³H]-SAM and either 0.05 mg/mL (1.5 μ M) GST-GAR or 0.014 mg/mL (1 μ M) as substrates.

SUPPLIED AS: ___ μ g/ μ l total protein in 25.4 mM Na₂HPO₄, 4.4 mM KH₂PO₄, pH 7.4, 137 mM NaCl, 2.7 mM KCl, 3 mM DTT, 30% (w/v) glycerol as determined by OD₂₈₀

STORAGE: -70°C. Thaw quickly and store on ice before use. The remaining, unused, undiluted enzyme should be refrozen quickly by, for example, snap freezing in a dry/ice ethanol bath or liquid nitrogen. Freezing and storage of diluted enzyme is not recommended.



Coomassie blue stained SDS-PAGE (4 – 12% acrylamide) of 4 μ g of RBC PRMT6. MW markers (left) are, from top, 220, 160, 120, 100, 90, 80, 70, 60, 50, 40, 30, 25, 20, 15, 10 kDa.



Methyltransferase Activity of PRMT6. Methylation determined as TCA-precipitable counts in a scintillation/filter plate assay. Reactions were 60 min., 30°C, with 1 μ M [³H]-SAM and protein substrates as indicated.

This product is not intended for therapeutic or diagnostic use in animals or in humans.

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