# Recombinant PRMT9 protein

**Catalog No: 81441, 81541**
**Expressed In:** Baculovirus

**Quantity:** 20, 1000 µg
**Concentration:** 0.3 µg/µl
**Source:** Human

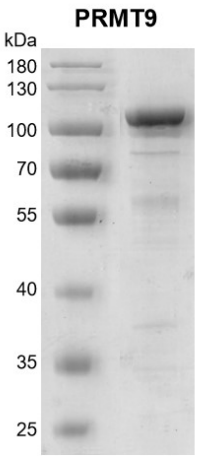
**Buffer Contents:** Recombinant PRMT9 protein is supplied in 25 mM HEPES-NaOH pH 7.5, 300 mM NaCl, 10% glycerol, 0.04% Triton X-100 and 0.5 mM TCEP.

**Background: PRMT9 (Protein arginine N-methyltransferase 9)** is a member of the protein arginine N-methyltransferase (PRMT) family capable of monomethylating and asymmetrically dimethylating arginine residue in proteins such as ESR1, histone H2, H3 and H4, PIAS1, HNRNPA1, HNRNPD, NFATC2IP, SUPT5H, TAF15 and EWS.**PRMT9** can both catalyze the formation of omega-N monomethylarginine (MMA) and symmetrical dimethylarginine (sDMA). Specifically mediates the symmetrical dimethylation of SF3B2. Involved in the regulation of alternative splicing of pre-mRNA.

**Protein Details:** Recombinant PRMT9 protein that includes full length of human PRMT9 protein (accession number NP_612373.2) was expressed in a baculovirus expression system, and contains an N-terminal FLAG tag. The molecular weight of the protein is 95.77 kDa.

**Application Notes:** This product was manufactured as described in Protein Details. Where possible, Active Motif has developed functional or activity assays for recombinant proteins. Additional characterization such as enzyme kinetic activity assays, inhibitor screening or other biological activity assays may not have been performed for every product. All available data for a given product is shown on the lot-specific Technical Data Sheet.

**Storage and Guarantee:** Recombinant proteins in solution are temperature sensitive and must be stored at -80°C to prevent degradation. Avoid repeated freeze/thaw cycles and keep on ice when not in storage. This product is for research use only and is not for use in diagnostic procedures. This product is guaranteed for 6 months from date of arrival.

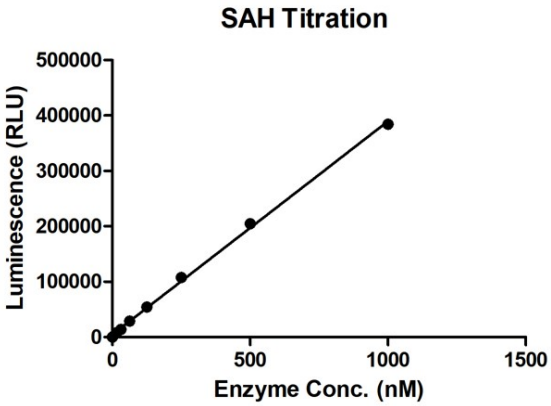



**Recombinant PRMT9 protein**

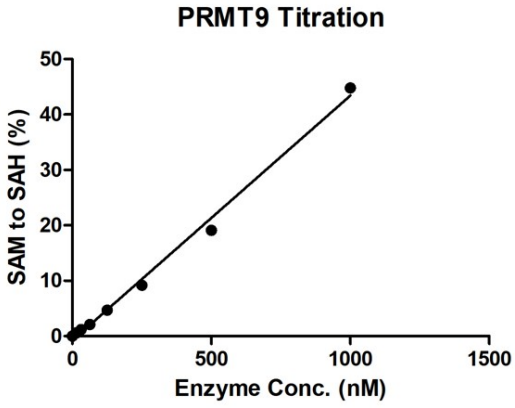
10% SDS-PAGE Coomassie staining

MW: 95.77 kDa

Purity: ≥ 90%




**MTase-Glo assay for PRMT9 activity**1 µM histone H4 was incubated with different concentrations of PRMT9 protein in 8 µl reaction system containing 50 mM Tris-HCl pH 8.6, 0.02% Triton X-100, 2 mM MgCl2, 1 mM TCEP, 50µM SAM at room temperature for 1 hour. 5×MTase-Glo Reagent was added to the products and incubated for 30 min. Then MTase-Glo Detection was added, and luminescence was read after another 30 min incubation. SAH standard curve (0-1 µM) was performed following the same protocol.




**MTase-Glo assay for PRMT9 activity**1 µM histone H4 was incubated with different concentrations of PRMT9 protein in 8 µl reaction system containing 50 mM Tris-HCl pH 8.6, 0.02% Triton X-100, 2 mM MgCl2, 1 mM TCEP, 50µM SAM at room temperature for 1 hour. 5×MTase-Glo Reagent was added to the products and incubated for 30 min. Then MTase-Glo Detection was added, and luminescence was read after another 30 min incubation. SAH standard curve (0-1 µM) was performed following the same protocol.