

## Recombinant PRMT7 protein

**Catalog No:** 31395, 31795

**Expressed In:** Baculovirus

**Quantity:** 20 µg

**Concentration:** 0.35 µg/µl

**Source:** Human

**Buffer Contents:** Full length recombinant PRMT7 protein expressed in Sf9 cells at a concentration of 0.35 µg/µl in 25 mM Tris pH 8.0, 300 mM NaCl, 5% Glycerol, 0.04% Triton X-100 and 0.2 mg/ml 3× FLAG peptide.

**Background: PRMT7 (Protein Arginine Methyltransferase 7)** is a type I arginine methyltransferase. Arginine methylation is a common post-translational modification of histones and other cellular proteins. PRMT7 specifically mediates the symmetrical dimethylation of histone H4 at Arg3 to form H4R3me2s. PRMT7 plays a role in gene imprinting by being recruited by CTCFL at the H19 imprinted control region (ICR) and methylating histone H4 to form H4R3me2s, possibly leading to recruitment of DNA methyltransferases at these sites. PRMT7 may also play a role in embryonic stem cell (ESC) pluripotency. PRMT7 is also able to mediate arginine methylation of histone H2A and myelin basic protein (MBP) *in vitro*. However, the biological relevance of such results is unclear.

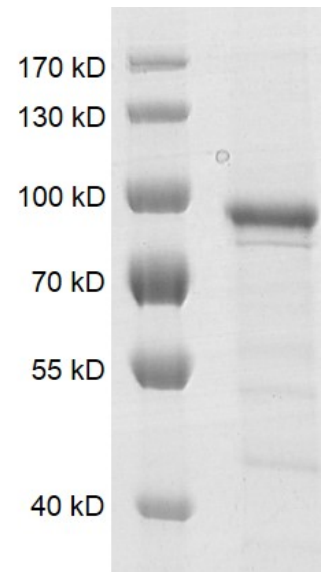
**Protein Details:** Recombinant PRMT7 (accession number NP\_061896.1) was expressed in Sf9 cells and contains an N-terminal FLAG tag with an observed molecular weight of 80.1 kDa. The recombinant protein is >80% pure by SDS-PAGE.

**Application Notes:** Recombinant PRMT7 is suitable for use in the study of enzyme kinetics, inhibitor screening, and selectivity profiling.

**Specific Activity:** Specifically mediates the symmetrical dimethylation of arginine residues in the small nuclear ribonucleoproteins Sm D1 (SNRPD1) and Sm D3 (SNRPD3). Specifically mediates the symmetric dimethylation of histone H4 'Arg-3' to form H4R3me2s.

**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 guaranteed for 6 months from date of receipt.

This product is for research use only and is not for use in diagnostic procedures.



**Recombinant PRMT7 protein gel.** PRMT7 protein was run on a 10% SDS-PAGE gel and stained with Coomassie Blue.