Recombinant PRMT4 (CARM1) protein

Catalog No: 81107, 81807
Lot No: 35317001
Expressed In: Baculovirus

Quantity: 20, 1000 µg
Concentration: 0.8 µg/µl
Source: Human

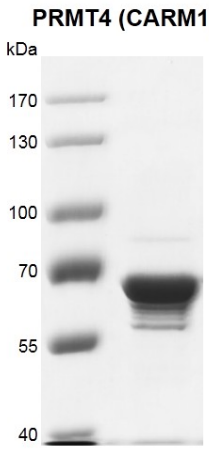
Buffer Contents: Full length recombinant PRMT4 (CARM1) protein is supplied in 25 mM HEPES-NaOH pH 7.5, 300 mM NaCl, 10% glycerol, 0.04% Triton X-100 and 0.5 mM TCEP.

Background: PRMT4 (CARM1) (Coactivator-associated arginine methyltransferase 1 or Carm1) is a protein arginine N-methyltransferase that catalyzes the mono- and asymmetric dimethylation of arginine residues in its substrate proteins. It serves as a coactivator of transcription and also plays a role in nuclear receptors. PRMT4 (CARM1) methylates histone H3 at Arg2, Arg17 and Arg26; it also methylates a number of non-histone substrates involved in the regulation and mechanism of gene expression.

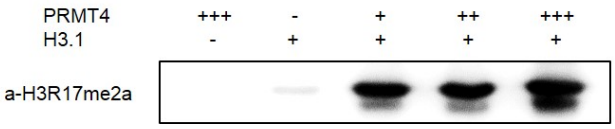
Protein Details: Recombinant human PRMT4 (CARM1) was expressed in a baculovirus expression system as the full length protein (accession number NP_954592.1) with an N-terminal Flag tag. The molecular weight of the protein is 66.8 kDa.

Application Notes: Recombinant PRMT4 (CARM1) protein is suitable for use in enzyme kinetics, inhibitor screening, and selectivity profiling.

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 PRMT4 (CARM1) protein gel
8% SDS-PAGE Coomassie staining
MW: 66.8 kDa
Purity: >88%



Recombinant PRMT4 (CARM1) protein activity assay
0.5 µg Histone H3.1 (Cat. No. 31294) were incubated with 0, 0.05 µg, 0.1 µg, 0.2 µg PRMT4 (CARM1) in 30 µl reaction system for 2 hours at room temperature, respectively. 6 µl reaction samples were loaded and run on a 13% SDS-PAGE gel. Western blot was used to detect the generation of products (H3R17me2a antibody, Cat. No. 39709, 1:1000 dilution).
The western blot results show that histone H3 is di-methylated on its Arginine 17 by PRMT4 (CARM1).