

Recombinant PRMT4 (CARM1) protein

Catalog No: 31347, 31747

Lot No: 18914002

Expressed In: Baculovirus

Quantity: 20, 1000 µg

Concentration: 0.6 µg/µl

Source: Mouse

Buffer Contents: Full length recombinant mouse PRMT4 (CARM1) protein supplied in 25 mM HEPES (pH 7.5), 300 mM NaCl, 5% glycerol and 0.2 mg/ml 3X FLAG peptide.

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.

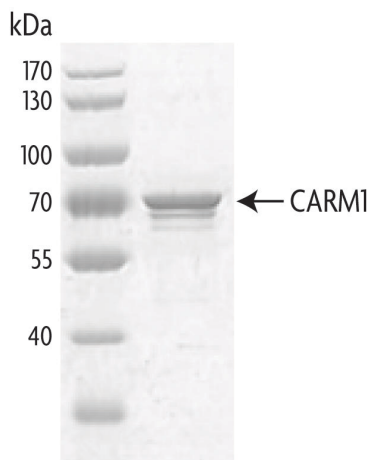
Protein Details: PRMT4 (CARM1) is protein arginine methyltransferase specific for histone H3. Recombinant mouse PRMT4 (CARM1) was expressed in Sf9 cells (accession number NP_067506) with an N-terminal FLAG-Tag. The molecular weight of the protein is ~67 kDa.

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

HMT Assay Conditions: 30 ng/µl Histone H3.1 was incubated with 30 ng/µl recombinant PRMT4 (CARM1) protein in reaction buffer including 50 mM TrisCl, pH 8.6, 0.02% Triton X-100, 2 mM MgCl₂, 1 mM TCEP, 9 nCi/µl 3H-SAM for 2 hours at room temperature. Activity was detected by fluorography.

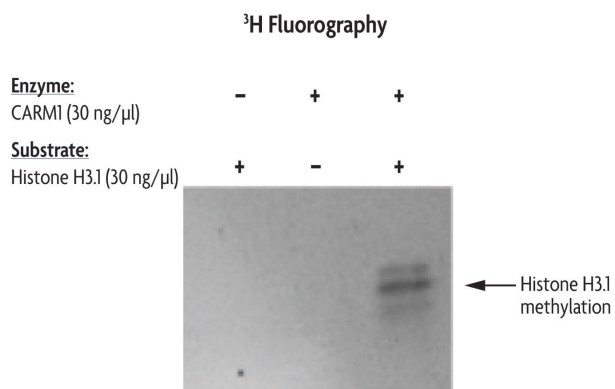
Storage and Guarantee: Recombinant proteins in solution are temperature sensitive and must be stored at -80°C to prevent degradation. Avoid repeated freeze/thaw cycles and keep on ice when not in storage. This product is guaranteed for 6 months from date of receipt.

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



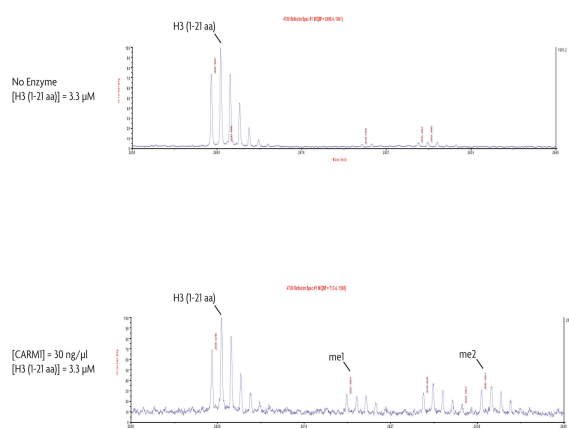
Recombinant Carm1 / Prmt4 protein gel.

Carm1 / Prmt4 protein was run on an SDS-PAGE gel and stained with Coomassie blue.



Carm1 / Prmt4 activity assay.

HMT assay measuring the activity of Recombinant Carm1 / Prmt4. Activity was detected by fluorography.



Carm1 / Prmt4 activity assay.

Recombinant Carm1 / Prmt4 activity measured using a demethylation assay. MALDI-TOF was used for detection.