

Product Information

PRMT1**rat, recombinant
expressed in *Escherichia coli***Catalog Number **P0083**Storage Temperature -20°C

Synonym: protein arginine methyltransferase 1

Product Description

Methyltransferases catalyze the addition of methyl groups to nitrogen, carbon, sulfur, and oxygen atoms of small molecules, lipids, proteins, and nucleic acids. Eight mammalian protein arginine methyltransferases (PRMT) have been identified. PRMT1 is the predominant member of the methyl transferases, which catalyzes the protein arginine *N*-methylation reactions. This enzyme has been implicated in various cellular processes including: transcription, RNA processing, and signal transduction.

This product is supplied in a solution of 50 mM Tris, pH 7.6, 5 mM DTT, 0.2% IGEPAL® CA-630, 150 mM NaCl, and 30% glycerol (w/v).

Specific Activity: ≥ 0.10 nmole/mgP/min

The N-methyltransferase activity is measured by ^3H -radiolabel incorporation into a histone for 30 minutes at 30°C . The activity is determined by measuring the radiolabel transfer from ^3H -AdoMet (methyl donor) to a histone (Catalog Number H4380), which is an arginine rich methyl acceptor.

Purity: $\geq 90\%$ (SDS-PAGE)**Precautions and Disclaimer**

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability

The product ships on dry ice and storage at -20°C is recommended. Upon first use, it is recommended to store the remaining enzyme in working aliquots at -20°C . The product remains active when stored at -20°C for at least two years.

References

1. Bedford, M.T., and Richard, S., Arginine methylation an emerging regulator of protein function. *Mol. Cell*, **18**, 263-272 (2005).
2. Goulet, I., et al., Alternative splicing yields protein arginine methyltransferase 1 isoforms with distinct activity, substrate specificity and subcellular localization. *J. Biol. Chem.*, **282**, 33009-33021 (2007).

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