



Product Data Sheet

□ Cat # RP-400

Recombinant Human Set7/9 Histone Methyltransferase

Size: □ 20 ug

Set 7/9 is a histone methyltransferase (HMTase) that transfers methyl groups to Lys4 of histone H3, in complex with S-adenosyl-L-methionine (AdoMet). The methylation of lysine residues of histones plays a critical role in the regulation of chromatin structure and gene expression. Acetylation, phosphorylation and methylation of the amino-terminal tails of histone are thought to be involved in the regulation of chromatin structure and function. The enzymes identified in the methylation of specific lysine residue on histones belong to the SET family with just one exception. Set7/9, unlike most other SET proteins, is exclusively a mono-methylase.

**Source:** *Escherichia Coli*. HMTase Human Recombinant produced in E.Coli is a single, non-glycosylated polypeptide chain containing 366 amino acids & having a molecular mass of 40.7 kDa. The HMTase purified by proprietary chromatographic techniques. The protein (1 mg/ml) containing 50mM Tris-HCl buffer (pH7.5), 0.2M NaCl, 5mM DTT and 20% glycerol.

**Applications and Suggested Dilutions:** Greater than 95.0% as determined by: (a) Analysis by RP-HPLC. (b) Analysis by SDS-PAGE. Users must optimize the appropriate concentration and conditions for each assay.

**Storage and Stability:** Store at 4°C if entire vial will be used within 1-2 weeks. Store, frozen at -20°C for longer periods of time. **Please prevent freeze-thaw cycles.** If supplied in powder then reconstitute it in 100 ul water for 1 mg/ml stock and store in liquid at 4°C for ~1 week or aliquots in suitable size and store at -20°C for long term storage.

**Usage:** This item is for LABORATORY RESEARCH USE ONLY. The product may not be used as drugs, agricultural or pesticidal products, food additives or household chemicals.

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