



## Product Datasheet

<b>Product Name</b>	Recombinant Human Set7/9 Histone Methyltransferase
<b>Cata No</b>	CB500491
<b>Source</b>	Escherichia Coli.

### Synonyms

Histone-lysine N-methyltransferase, H3 lysine-4 specific SET7, EC 2.1.1.43, Histone H3-K4 methyltransferase, H3-K4-HMTase, SET domain-containing protein 7, Set9, SET7/9.

### Description

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.

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.

### Physical Appearance

Sterile Filtered clear solution.

### Formulation

The protein (1 mg/ml) containing 50mM Tris-HCl

buffer (pH7.5), 0.2M NaCl, 5mM DTT and 20% glycerol.

### 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.

### Purity

Greater than 95.0% as determined by:

- (a) Analysis by RP-HPLC.
- (b) Analysis by SDS-PAGE.

### Amino Acid Sequence

MDSDDDEMVEE AVEGHLDDDG LPHGFCTVTY  
SSTDRFEGNF VHGEKNGRGK FFFFDGSTLE  
GYYVDDALQG QGVYTYEDGG VLQGTYYVDGE  
LNGPAQEYDT DGRLIFKGQY KDNIRHGVCW  
IYYPDGGSLV GEVNEDGEMT GEKIAYVYPD  
ERTALYGKFI DGEMIEGKLA TLMSTEEGRP  
HFELMPGNSV YHFDKSTSSC ISTNALLPDP  
YESERVYVAE SLISSAGEGL FSKVAVGPNT  
VMSFYNGVRI THQEVDSDRW ALNGNTLSLD  
EETVIDVPEP YNHVSKYCAS LGHKANHSFT  
PNCIYDMFVH PRFGPIKCIR TLRAVEADEE  
LTVAYGYDHS PPGKSGPEAP