Recombinant Human SET Domain-Containing Protein 7

Cat. No. SETD7-89H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant human SETD7 protein was expressed in E.coli and purified by using conventional chromatography techniques, 40.7 kDa (366 aa).
Species	Human
Source	E.coli
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.
Sequences of amino acids	MDSDDEMVEE AVEGHLDDDG LPHGFCTVTY SSTDRFEGNF VHGEKNGRGK FFFFDGSTLE GYYVDDALQG QGVYTYEDGG VLQGTYVDGE LNGPAQEYDT DGRLIFKGQY KDNIRHGVCW IYYPDGGSLV GEVNEDGEMT GEKIAYVYPD ERTALYGKFI DGEMIEGKLA TLMSTEEGRP HFELMPGNSV YHFDKSTSSC ISTNALLPDP YESERVYVAE SLISSAGEGL FSKVAVGPNT VMSFYNGVRI THQEVDSRDW ALNGNTLSLD EETVIDVPEP YNHVSKYCAS LGHKANHSFT PNCIYDMFVH PRFGPIKCIR TLRAVEADEE LTVAYGYDHS PPGKSGPEAP EWYQVELKAF QATQQK

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Formulation	Liquid. In 50 mM Tris-HCl buffer (pH 7.5) containing 5 mM DTT, 200 mM NaCl, 20% glycerol
Purity	> 95% by SDS - PAGE
Concentration	1 mg/ml (determined by Bradford assay)
Storage	Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.

GENE INFORMATION

Gene Name	SETD7 SET domain containing (lysine methyltransferase) 7 [Homo sapiens]
Synonyms	SETD7; SET7; FLJ21193; KIAA1717; KMT7; SET7/9; SET9; EC 2.1.1.43; Set9; H3-K4-HMTase; H3-K4-HMTase SETD7; H3 lysine-4 specific SET7; Histone-lysine N-methyltransferase; Histone H3-K4 methyltransferase; histone H3-lysine 4-specific methyltransferase; SET domain-containing protein 7; Histone H3-K4 methyltransferase SETD7; Lysine N-methyltransferase 7; SET domain containing (lysine methyltransferase) 7; histone H3-K4 methyltransferase; histone-lysine N-methyltransferase; protein methylase III; protein methylase 3; protein (lysine) methyltransferase; protein methyltransferase II; protein-lysine N-methyltransferase; histone H1-specific S-adenosylmethionine:protein-lysine N-methyltransferase; S-adenosyl-L-methionine:histone-L-lysine N6-methyltransferase
Gene ID	80854
mRNA Refseq	NM_030648
Protein Refseq	NP_085151

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MIM	606594
UniProt ID	Q8WTS6
Chromosome Location	4q28
Pathway	Lysine degradation
Function	histone-lysine N-methyltransferase activity; methyltransferase activity; protein binding; transferase activity
PDBrendering based on 1h3i. Available structures:1h3i,1mt6,1m	

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