

## Active Recombinant Human SETD7, GST-tagged

Cat. No. SETD7-185H Lot. No. (See product label)

### SPECIFICATION

<b>Product Overview</b>	Recombinant full-length human SETD7 was expressed by baculovirus in Sf9 insect cells using an N-terminal GST tag.
<b>Species</b>	Human
<b>Source</b>	Sf9 Cells
<b>Description</b>	SETD7 or SET domain containing lysine methyltransferase 7 is a lysine methyltransferase which can methylates lysine-4 (K4) in histone H3 in vitro and in vivo. Methylation of K4 in histone H3 by SETD7 and methylation of K9 in histone H3 by SUV39H1 were found to have differential effects on subsequent histone acetylation by p300. SETD7 can also methylate p53 at lys372 within the C-terminal regulatory region. Methylated p53 is restricted to the nucleus and the modification positively affects its stability. SETD7 regulates the expression of p53 target genes in a manner dependent on the p53 methylation site.
<b>Form</b>	Recombinant protein stored in 50mM Tris-HCl, pH 7.5, 150mM NaCl, 10mM glutathione, 0.1mM EDTA, 0.25mM DTT, 0.1mM PMSF, 25% glycerol.
<b>Bio-activity</b>	The specific activity of SETD7 was determined to be 40 nmol /min/mg
<b>Molecular Mass</b>	~75 kDa
<b>Purity</b>	>95% by densitometry

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<b>Applications</b>	Methyltransferase Assay
<b>Storage</b>	Store product at –70 centigrade. For optimal storage, aliquot target into smaller quantities after centrifugation and store at recommended temperature. For most favorable performance, avoid repeated handling and multiple freeze/thaw cycles.
<b>Concentration</b>	0.1 µg/µl
<b>GENE INFORMATION</b>	
<b>Gene Name</b>	<a href="#">SETD7 SET domain containing (lysine methyltransferase) 7 [ Homo sapiens ]</a>
<b>Official Symbol</b>	SETD7
<b>Synonyms</b>	SETD7; SET domain containing (lysine methyltransferase) 7; histone-lysine N-methyltransferase SETD7; KIAA1717; KMT7; SET7; SET7/9; Set9; H3-K4-HMTase SETD7; lysine N-methyltransferase 7; SET domain-containing protein 7; histone H3-K4 methyltransferase SETD7; histone H3-lysine 4-specific methyltransferase; SET9; FLJ21193;
<b>Gene ID</b>	<a href="#">80854</a>
<b>mRNA Refseq</b>	<a href="#">NM_030648</a>
<b>Protein Refseq</b>	<a href="#">NP_085151</a>
<b>MIM</b>	<a href="#">606594</a>
<b>UniProt ID</b>	<a href="#">Q8WTS6</a>
<b>Chromosome</b>	4q31.1

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**Location****Pathway**

Lysine degradation, organism-specific biosystem; Lysine degradation, conserved biosystem; p53 pathway, organism-specific biosystem;

**Function**

histone-lysine N-methyltransferase activity; histone-lysine N-methyltransferase activity; methyltransferase activity; p53 binding; protein binding; protein-lysine N-methyltransferase activity; transferase activity;

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