Recombinant Human SET domain containing 7, histone lysine methyltransferase Protein, His tagged

Cat. No. SETD7-121H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant human SETD7/SET7/SET9 protein (Q8WTS6) (Phe 52-Lys 344) with a His tag at the C-terminus was expressed in E. coli.
Species	Human
Source	E.coli
ProteinLength	52-344aa
Description	Histone methyltransferase that specifically monomethylates 'Lys-4' of histone H3. H3 'Lys-4' methylation represents a specific tag for epigenetic transcriptional activation. Plays a central role in the transcriptional activation of genes such as collagenase or insulin. Recruited by IPF1/PDX-1 to the insulin promoter, leading to activate transcription. Has also methyltransferase activity toward non-histone proteins such as CGAS, p53/TP53, TAF10, and possibly TAF7 by recognizing and binding the [KR]-[STA]-K in substrate proteins. Monomethylates 'Lys-189' of TAF10, leading to increase the affinity of TAF10 for RNA polymerase II. Monomethylates 'Lys-372' of p53/TP53, stabilizing p53/TP53 and increasing p53/TP53-mediated transcriptional activation. Monomethylates 'Lys-491' of CGAS, promoting interaction between SGF29 and CGAS.
Tag	C-His
Molecular Mass	34.2 kDa

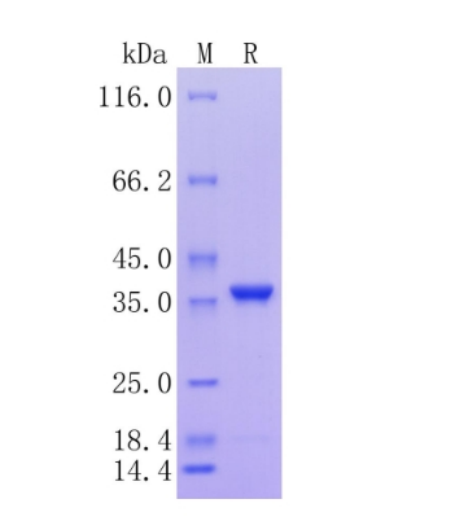
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Endotoxin	Less than 1.0 EU/μg by the LAL method.
Purity	>95% as determined by SDS-PAGE.
Storage	Please avoid repeated freeze-thaw cycles. Samples are stable for up to twelve months from date of receipt at -20 to -80 centigrade. It is recommended that aliquot the reconstituted solution to minimize freeze-thaw cycles.
Storage Buffer	Lyophilized from a 0.2 μm filtered solution of PBS, pH7.4, 5% Trehalose, 5% mannitol.
Reconstitution	Reconstitute at 250 μg/mL in sterile water.

GENE INFORMATION

Gene Name	SETD7 SET domain containing 7, histone lysine methyltransferase [Homo sapiens (human)]
Official Symbol	SETD7
Synonyms	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;
Gene ID	80854
mRNA Refseq	NM_030648
Protein Refseq	NP_085151

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MIM	606594
UniProt ID	Q8WTS6
Protein on SDS-PAGE under reducing (R) condition.	

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