

Recombinant human SET7/9 protein

Catalog Number: SET3001

PRODUCT INFORMATION

Expression system

E.coli

Domain

1-366aa

UniProt No.

Q8WTS6

NCBI Accession No.

NP_085151

Alternative Names

SET domain-containing protein 7, SETD7, KIAA1717, KMT7, SET7, SET9, SET7/9 Histone methyltransferase, EC 2.1.1.43, Histone H3-K4 methyltransferase SETD7, H3-K4-HMTase SETD7, SET domain-containing protein 7, SET7/9, Lysine N-methyltransferase 7, Histone-lysine N-methyltransferase SETD7, SET domain-containing protein 7 FLJ21193, H3 K4 HMTase, H4 lysine-4 specific, Histone H3 K4 methyltransferase, Histone H3 lysine 4 specific methyltransferase, Histone H4-K4 methyltransferase, Histone lysine N methyltransferase H3 lysine 4 specific SET7, Histone-lysine N-methyltransferase, Lysine methyltransferase, SET 7, SET 7/9, SET 9, SET D7, SET domain containing protein 7, SET domain-containing protein 8,

PRODUCT SPECIFICATION

Molecular Weight

40.7 kDa (366aa) confirmed by MALDI-TOF

Concentration

1mg/ml (determined by Bradford assay)

Formulation

Liquid in. 50mM Tris-HCl buffer (pH 7.5) containing 0.2M NaCl, 5mM DTT, 20%glycerol

Purity

> 95% by SDS-PAGE

Endotoxin level

< 1 EU per 1ug of protein (determined by LAL method)

Tag

Non-Tagged

Application

SDS-PAGE

Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

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BACKGROUND

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. SET 7/9, unlike most other SET proteins, is exclusively a mono-methylase, Recombinant human SET7/9, was cloned into an E. coli expression vector and was purified to apparent homogeneity by using conventional column chromatography techniques.

Amino acid Sequence

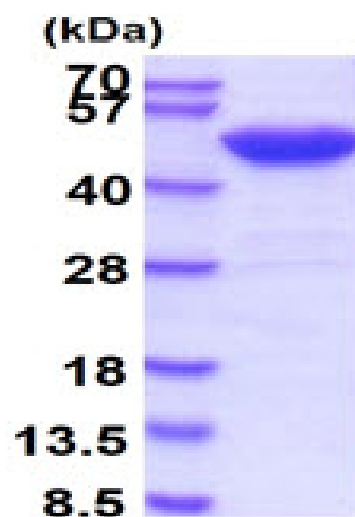
MDSDDDEMVEE AVEGHLDDDDG LPHGFCTVTY SSTDRFEGNF VHGEKNGRGK FFFFDGSTLE GYYVDDALQG
QGYYTYEDGG VLQGTYYVDGE LNGPAQEYDT DGRLIFKGQY KDNIRHGVCW IYYPDGGSLV GEVNEDGEMT GEKIAYVYPD
ERTALYGKFI DGEMIEGKLA TLMSTEEGRP HFELMPGNSV YHFDKSTSSC ISTNALLPDP YESERVYVAE SLISSAGEGL
FSKVAVGPNT VMSFYNGVRI THQEVDSRDW ALNGNTLSLD EETVIDVPEP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

General References

Xiao B., et al. (2003) Nature. 421(6923):652-6.
Kwon T., et al. (2003) EMBO J. 22, 292-303.

DATA

SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.

10% SDS-PAGE (3ug)