



SET7/9 Protein Crystal

Catalog: CBCRY57

PRODUCT INFORMATION

Name SET7/9 Protein Crystal

Cat No. CBCRY57

Fragment Residues 70-366

Protein Description SET Domain Containing (Lysine Methyltransferase) 7

Background

Histone-lysine N-methyltransferase SETD7 belongs to histone methyltransferase that specifically monomethylates 'Lys-4' of histone H3. H3 'Lys-4' methylation represents a specific tag for epigenetic transcriptional activation. It plays a central role in the transcriptional activation of genes such as collagenase or insulin. It can be recruited by IPF1/PDX-1 to the insulin promoter, leading to activate transcription. SETD7 has also methyltransferase activity toward non-histone proteins such as p53/TP53, TAF10, Monomethylates 'Lys-372' of p53/TP53, stabilizing p53/TP53 and increasing p53/TP53-mediated transcriptional activation.

Protein Classification Transferase

Structure Weight 33421.14 Da

Method X-Ray Diffraction

Resolution 2.30 Å

Ligand Chemical Component S-ADENOSYLMETHIONINE

Reference

Kwon T, Chang JH, Kwak E, Lee CW, Joachimiak A, Kim YC, Lee J, Cho Y. Mechanism of histone lysine methylation transfer revealed by the structure of set7/9-adomet. *Embo J.* (2003) 22 p.292