



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	<p>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.</p>
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-adenomethyltransferase. <i>Embo J.</i> (2003) 22 p.292