



WDR5 Protein Crystal

Catalog: CBCRY09

PRODUCT INFORMATION

Product Name	WDR5 Protein Crystal
Catalog Number	CBCRY09
Fragment	Residues 24-334
Protein Description	WD-repeat protein 5
Background	The WD40 repeat protein WDR5 specifically associates with the K4-methylated histone H3 in human cells. The structure of WDR5 in complex with a dimethylated H3-K4 peptide was determined. Unlike the chromodomain that recognizes the methylated H3-K4 through a hydrophobic cage, the specificity of WDR5 for methylated H3-K4 is conferred by the nonconventional hydrogen bonds between the two zeta-methyl groups of the dimethylated Lys4 and the carboxylate oxygen of Glu322 in WDR5. The three amino acids Ala-Arg-Thr preceding Lys4 form most of the specific contacts with WDR5, with Ala1 forming intermolecular hydrogen bonds and salt bridges, and the side chain of Arg2 inserting into the central channel of WDR5.
Protein Classification	Structural protein and DNA binding protein
Structure Weight	35306.44 Da
PDBID	2G9A
Method	X-Ray Diffraction
Resolution	2.7 Å



Reference	Han Z, Guo L, Wang H, Shen Y, Deng XW, Chai J. Structural basis for the specific recognition of methylated histone H3 lysine 4 by the WD-40 protein WDR5. Mol. Cell 2006, 22(1):137-44.
cDNA Length	933

USAGE GUIDELINES

General Handling	Avoid excessive mixing or vortexing to prevent aggregation. Long-term storage above -80°C may result in aggregate formation. Thaw on ice before use.
Storage	Short term: +2°C to +8°C (up to 1 week) Long term: -80°C (stable for 12 months)
Stability	Stable for 12 months at -80°C. Avoid repeated freeze-thaw cycles.
Freeze / Thaw	Can be frozen, but limit to 3 freeze/thaw cycles to maintain particle integrity.

Important: This product is for **research use only**. Not intended for diagnostic or therapeutic applications. Please refer to the Safety Data Sheet (SDS) for complete handling and safety information.