



LSD1 with CoREST Protein Crystal

Catalog: CBCRY04

PRODUCT INFORMATION

Product Name	LSD1 with CoREST Protein Crystal
Catalog Number	CBCRY04
Fragment	Residues 171-836 Residues 308-482
Protein Description	Lysine-specific histone demethylase1 complexed with REST corepressor1
Background	Histone modifications, such as acetylation and methylation, are important epigenetic marks that regulate diverse biological processes that use chromatin as the template, including transcription. Dysregulation of histone acetylation and methylation leads to the silencing of tumor suppressor genes and contributes to cancer progression. Inhibitors of enzymes that catalyze the addition and removal of these epigenetic marks thus have therapeutic potential for treating cancer. Lysine-specific demethylase 1 (LSD1) is the first discovered histone lysine demethylase and, with the help of its cofactor CoREST, specifically demethylates mono- and dimethylated histone H3 lysine 4 (H3-K4), thus repressing transcription.
Protein Classification	Oxidoreductase/repressor
Structure Weight	101692.78 Da
PDBID	2UXX
Method	X-Ray Diffraction
Resolution	2.74 Å



Ligand Chemical Component	chloride ion, FA9, glycerol
Reference	Yang, M., Culhane, J.C., Szewczuk, L.M., Jalili, P., Ball, H.L., Machius, M., Cole, P.A., Yu, H. Structural Basis for the Inhibition of the Lsd1 Histone Demethylase by the Antidepressant Trans-2-Phenylcyclopropylamine. <i>Biochemistry</i> , 2007, 46: 8058-8065
cDNA Length	1998 (LSD1) 705 (CoREST)

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.