



PDXK Protein Crystal

Catalog: CBCRY19

PRODUCT INFORMATION

Product Name	PDXK Protein Crystal
Catalog Number	CBCRY19
Fragment	Full length
Protein Description	Pyridoxal kinase
Background	Pyridoxal kinase, a member of the ribokinase superfamily, catalyzes the ATP-dependent phosphorylation reaction of vitamin B6 and is an essential enzyme in the formation of pyridoxal-5'-phosphate, a key cofactor for over 100 enzymes. Pyridoxal kinase is thus regarded as a potential target for pharmacological agents. Structure comparison reveals that the key 12-residue peptide over the active site in HPLK is a beta-strand/loop/beta-strand flap, while the corresponding peptide in sheep brain enzyme adopts a loop conformation. Moreover, HPLK possesses a more hydrophobic ATP-binding pocket.
Protein Classification	Transferase
Structure Weight	74135.20 Da
PDBID	2F7K
Method	X-Ray Diffraction
Resolution	2.8Å
Reference	Cao, P., Gong, Y., Tang, L., Leung, Y.C., Jiang, T. (2006) Crystal structure of human pyridoxal kinase J.Struct.Biol. 154: 327-332



cDNA Length	981
--------------------	-----

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.