



PDXK Protein Crystal

Catalog: CBCRY19

PRODUCT INFORMATION

Name PDXK Protein Crystal

Cat No. 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

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