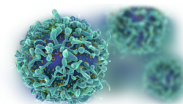


PTP1B Protein Crystal

Catalog: CBCRY52

PRODUCT INFORMATION

Product Name	PTP1B Protein Crystal
Catalog Number	CBCRY52
Fragment	Catalytic domain
Protein Description	Protein Tyrosine Phosphatase, Non-receptor Type 1
Background	Tyrosine-protein phosphatase non-receptor type 1 belongs to tyrosine phosphatase (PTP) family, which was isolated and identified based on its enzymatic activity and amino acid sequence. PTPs catalyze the hydrolysis of the phosphate monoesters specifically on tyrosine residues. Members of the PTP family share a highly conserved catalytic motif, which is essential for the catalytic activity. Tyrosine-protein phosphatase acts as a regulator of endoplasmic reticulum unfolded protein response. It mediates dephosphorylation of EIF2AK3/PERK, and also regulates the hepatocyte growth factor receptor signaling pathway.
Protein Classification	Hydrolase
Structure Weight	37896.55 Da
PDBID	1PTY
Method	X-Ray Diffraction
Resolution	1.85 Å



Ligand Chemical Component	Mg ²⁺ , O-PHOSPHOTYROSINE
Reference	Puius YA, Zhao Y, Sullivan M, Lawrence DS, Almo SC, Zhang ZY. Crystal Structure of Protein Tyrosine Phosphatase 1B Complexed With Two Phosphotyrosine Molecules.
cDNA Length	1305

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.