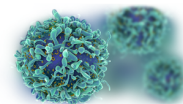


DEBP Protein Crystal

Catalog: CBCRY22

PRODUCT INFORMATION

Product Name	DEBP Protein Crystal
Catalog Number	CBCRY22
Fragment	Residues 24-302
Protein Description	Periplasmic Binding Transport Protein
Background	The crystal structure of a periplasmic l-aspartate/l-glutamate binding protein (DEBP) from <i>Shigella flexneri</i> complexed with an l-glutamate molecule has been determined and refined to an atomic resolution of 1.0 Å. There are two DEBP molecules in the asymmetric unit. The refined model contains 4462 non-hydrogen protein atoms, 730 water molecules, 2 bound glutamate molecules, and 2 Tris molecules from the buffer used in crystallization. The final R(cryst) and R(free) factors are 13.61% and 16.89%, respectively.
Protein Classification	Transport protein
Structure Weight	64851.95 Da
PDBID	2VHA
Method	X-Ray Diffraction
Resolution	2.8Å
Ligand Chemical Component	Glutamic acid; 2-amino-2-hydroxymethyl-propane-1,3-diol



Reference	Hu, Y.L., Fan, C.-P., Fu, G.S., Zhu, D.Y., Jin, Q., Wang, D.-C. (2008) Crystal Structure of a Glutamate/Aspartate Binding Protein Complexed with a Glutamate Molecule: Structural Basis of Ligand Specificity at Atomic Resolution. J.Mol.Biol. 382: 99-111
cDNA Length	834

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.