



THEM2 Protein Crystal

Catalog: CBCRY16

PRODUCT INFORMATION

Product Name	THEM2 Protein Crystal
Catalog Number	CBCRY16
Fragment	Full length
Protein Description	Thioesterase superfamily member 2
Background	The crystallographic structure of recombinant hTHEM2, determined by the single-wavelength anomalous dispersion method at 2.3Å resolution, demonstrates that hTHEM2 indeed contains a hotdog-fold and forms a back-to-back tetramer as other hotdog proteins. Based on structural and sequence conservation, the thioesterase active site in hTHEM2 is predicted. The structure and substrate specificity are most similar to those of the bacterial phenylacetyl-CoA hydrolase. Asp65, located on the central alpha-helix of subunit B, was shown by site-directed mutagenesis to be essential to catalysis.
Protein Classification	Hydrolase
Structure Weight	132969.96 Da
PDBID	2F0X
Method	X-Ray Diffraction
Resolution	2.3Å



Ligand Chemical Component	sulfate ion
Reference	Cheng, Z., Song, F., Shan, X., Wei, Z., Wang, Y., Dunaway-Mariano, D., Gong, W. (2006) Crystal structure of human thioesterase superfamily member 2 Biochem.Biophys.Res.Comm. 349: 172-177
cDNA Length	528

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.