



THEM2 Protein Crystal

Catalog: CBCRY16

PRODUCT INFORMATION

Name THEM2 Protein Crystal

Cat No. 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

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.Commun.* 349: 172-177