

Embryonic Ectoderm Development

Mouse, EED

Expressed in *E.Coli*

Cat. No. CBCRY07

Lot. No. (See product label)

BACKGROUND

The crystal structure of EED in complex with a 30 residue peptide from EZH2 reveals that the peptide binds to the bottom of the WD-repeat domain of EED. The structural determinants of EZH2-EED interaction are present not only in EZH2 and EZH1 but also in its *Drosophila* homolog E(Z), suggesting that the recognition of ESC by E(Z) in *Drosophila* employs similar structural motifs. Structure-based mutagenesis identified critical residues from both EED and EZH2 for their interaction.

MOLECULAR DESCRIPTION

Protein classification: gene regulation

Structure Weight: 45399.05 Da

Polymer: 1

Molecule: Embryonic ectoderm development

Chains: A

Type: polypeptide (L)

Chain Length: 361 amino acids

Polymer: 2

Molecule: Enhancer of zeste homolog 2

Chains: B

Type: polypeptide (L)

Chain Length: 30 amino acids

CRYSTAL INFORMATION

PDB ID: [2QXV](#)

MMDB ID: [59571](#)

Source: E.Coli

Method: X-Ray Diffraction

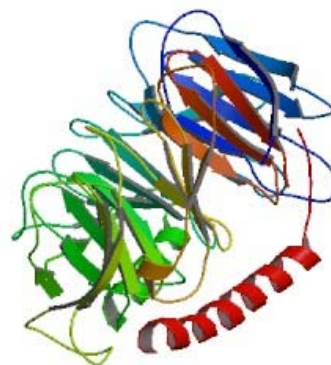
Resolution: 1.82 Å

PRIMARY CITATION

Han, Z., Xing, X., Hu, M., Zhang, Y., Liu, P., Chai, J. (2007) Structural basis of EZH2 recognition by EED Structure 15: 1306-1315

FOR RESEARCH USE ONLY

CRYSTAL STRUCTURE



GENE INFORMATION

Gene Name: [Eed](#)

Synonyms: embryonic ectoderm development; ENSMUSG00000039373; I(7)5Rn; I7Rn5; lusk; OTTMUSP00000023294; lethal, Chr 7, Rinchik 5; heed; wd protein associating with integrin cytoplasmic t; wait1; wd protein associating with integrin cytoplasmic tails 1

GeneID: [13626](#)

Chromosome Location: 7

Function: chromatin binding; histone methyltransferase binding; protein binding

Gene Name: [Ezh2](#)

Synonyms: enhancer of zeste homolog 2 (*Drosophila*); Enx-1, Enx1h, KIAA4065, KMT6; MGC90723; mKIAA4065; OTTMUSP00000023406; enhancer of zeste homolog 2

GeneID: [14056](#)

Chromosome Location: 6 19.2 cM

Function: DNA binding; chromatin binding; histone methyltransferase activity; methyltransferase; protein binding; transferase activity.

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