

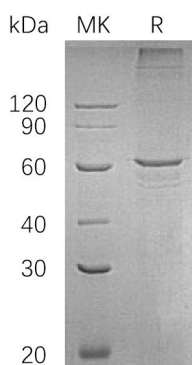
**Product Name: Recombinant Human SMAD4 (C-6His)**  
**Catalog #: PEH1541**



## Summary

<b>Name</b>	SMAD4/SMAD family member 4
<b>Purity</b>	Greater than 95% as determined by reducing SDS-PAGE
<b>Endotoxin level</b>	<1 EU/μg as determined by LAL test.
<b>Construction</b>	Recombinant Human Mothers Against Decapentaplegic Homolog 4 is produced by our E.coli expression system and the target gene encoding Met1-Asp552 is expressed with a 6His tag at the C-terminus.
<b>Accession #</b>	Q13485
<b>Host</b>	E.coli
<b>Species</b>	Human
<b>Predicted Molecular Mass</b>	61.5 KDa
<b>Formulation</b>	Lyophilized from a 0.2 μm filtered solution of 20mM Tris-HCl, pH 8.0.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature listed below.
<b>Stability&amp;Storage</b>	Store at ≤-70°C, stable for 6 months after receipt. Store at ≤-70°C, stable for 3 months under sterile conditions after opening. Please minimize freeze-thaw cycles.
<b>Reconstitution</b>	Always centrifuge tubes before opening. Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100μg/ml. Dissolve the lyophilized protein in distilled water. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

## SDS-PAGE image



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## Background

### Alternative Names

Mothers Against Decapentaplegic Homolog 4; MAD Homolog 4; Mothers Against DPP Homolog 4; Deletion Target in Pancreatic Carcinoma 4; SMAD Family Member 4; SMAD 4; Smad4; hSMAD4; SMAD4; DPC4; MADH4

### Background

SMAD Family Member 4 (SMAD4) is a cytoplasmic protein that belongs to the Dwarfin/SMAD family. SMAD4 contains one MH1 (MAD homology 1) domain and one MH2 (MAD homology 2) domain. It is the component of the heterotrimeric SMAD2/SMAD3-SMAD4 complex that forms in the nucleus and is required for the TGF-mediated signaling. SMAD4 promotes binding of the SMAD2/SMAD4/FAST-1 complex to DNA and provides an activation function required for SMAD1 or SMAD2 to stimulate transcription. SMAD4 may act as a tumor suppressor. It positively regulates PDPK1 kinase activity by stimulating its dissociation from the 14-3-3 protein YWHAQ which acts as a negative regulator. Mutations or deletions in SMAD4 have been shown to result in pancreatic cancer, juvenile polyposis syndrome, and hereditary hemorrhagic telangiectasia syndrome.

## Note

For Research Use Only , Not for Diagnostic Use.