# **PRODUCT INFORMATION**

Expression system E.coli

**Domain** 1-552aa

**UniProt No.** Q13485

NCBI Accession No. NP\_005350

#### **Alternative Names**

Mothers against decapentaplegic homolog 4, Mothers against decapentaplegic homolog 4, SMAD family member 4, DPC4, JIP, MADH4, SMAD4, Mothers against decapentaplegic homolog 4 (Small) Mothers Against Decapentaplegic, Deleted in Pancreatic Carcinoma, Deleted in pancreatic carcinoma locus 4, Deletion target in pancreatic carcinoma 4, DPC 4, MAD mothers against decapentaplegic Drosophila homolog 4, hSMAD4, MAD homolog 4, MAD mothers against decapentaplegic homolog 4, MADH 4, Med, Medea, Mothers against DPP homolog 4, OTTHuMP00000163548, Smad 4, SMAD mothers against DPP homolog 4.

# **PRODUCT SPECIFICATION**

**Molecular Weight** 

62.6 kDa (572aa)

**Concentration** 1mg/ml (determined by Bradford assay)

### Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 20% glycerol

Purity

> 90% by SDS-PAGE

**Tag** His-Tag

Application SDS-PAGE

#### **Storage Condition**

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

## BACKGROUND

### Description

SMAD4 belongs to the SMAD family of proteins that mediate signal transduction by the TGF-beta/activin/BMP-2/4



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cytokine superfamily from receptor Ser/Thr protein kinases at the cell surface to the nucleus. SMAD4 promotes the binding of the SMAD2/SMAD4/FAST-1 complex to DNA and provides the function of activation required for SMAD1 or SMAD2 to stimulate transcription and may also act as a tumor suppressor. Recombinant SMAD4 protein was expressed in E. coli and purified by using conventional chromatography techniques.

#### **Amino acid Sequence**

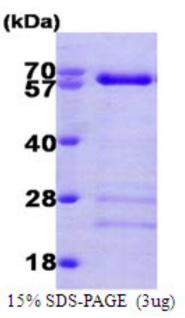
MGSSHHHHHH SSGLVPRGSH MDNMSITNTP TSNDACLSIV HSLMCHRQGG ESETFAKRAI ESLVKKLKEK KDELDSLITA ITTNGAHPSK CVTIQRTLDG RLQVAGRKGF PHVIYARLWR WPDLHKNELK HVKYCQYAFD LKCDSVCVNP YHYERVVSPG IDLSGLTLQS NAPSSMMVKD EYVHDFEGQP SLSTEGHSIQ TIQHPPSNRA STETYSTPAL LAPSESNATS TANFPNIPVA STSQPASILG GSHSEGLLQI ASGPQPGQQQ NGFTGQPATY HHNSTTTWTG SRTAPYTPNL PHHQNGHLQH HPPMPPHPGH YWPVHNELAF QPPISNHPAP EYWCSIAYFE MDVQVGETFK VPSSCPIVTV DGYVDPSGGD RFCLGQLSNV HRTEAIERAR LHIGKGVQLE CKGEGDVWVR CLSDHAVFVQ SYYLDREAGR APGDAVHKIY PSAYIKVFDL RQCHRQMQQQ AATAQAAAA QAAAVAGNIP GPGSVGGIAP AISLSAAAGI GVDDLRRLCI LRMSFVKGWG PDYPRQSIKE TPCWIEIHLH RALQLLDEVL HTMPIADPQP LD

### **General References**

Shi Y., et al. (1997) Nature. 388(6637):87-93. de Caestecker MP, et al. (1997) J Biol Chem. 272(21):13690-6.

## DATA

#### SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.