

**California Bioscience** 

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# **Product Datasheet**

Product Name	Mothers Against Decapentaplegic Homolog 4 Human Recombinant
Cata No	CB501076
Source	Escherichia Coli.
Synonyms	JIP, DPC4, MADH4, SMAD-4, DPC-4, MADH-4, Mothers against decapentaplegic
	homolog 4, Mothers against DPP homolog 4, SMAD 4, hSMAD4, Deletion target in
	pancreatic carcinoma 4, SMAD4, SMAD family member 4.

### Description

SMAD4 is part of the SMAD family of proteins that mediate signal transduction by the TGF-beta/activin/BMP-2/4 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 acts as a tumor suppressor. SMAD4 is a target molecule for functional inactivation in cervical cancer. SMAD4 is an important biomarker for malignant transformation atakes part in inducing apoptosis by modulating Bcl-2/Bax balance.

SMAD4 Human Recombinant produced in E.Coli is a single, non-glycosylated polypeptide chain containing 572 amino acids (1-552) and having a molecular mass of 62.6 kDa. SMAD4 is fused to 20 amino acid His-Tag at N-Terminus and purified by standard chromatography techniques.

### **Physical Appearance**

Sterile Filtered colorless solution

### **Purity**

Greater than 90.0% as determined by SDS-PAGE.

## Formulation

The SMAD4 protein solution contains 20mM Tris-HCl pH-8, and 20% glycerol.

#### Stability

SMAD4 although stable 4°C for 4 weeks, should be stored desiccated below -18°C.

For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).

Please prevent freeze-thaw cycles.

#### 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 AATAQAAAAA QAAAVAGNIP GPGSVGGIAP AISLSAAAGI GVDDLRRLCI LRMSFVKGWG PDYPRQSIKE TPCWIEIHLH RALQLLDEVL HTMPIADPQP LD.