

Recombinant Full Length Human SMAD Family Member 4, His-tagged

Cat. No. SMAD4-386H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant SMAD4 protein was expressed in E.coli and purified by using conventional chromatography techniques, 62.6 kDa (572 aa).
Species	Human
Source	E.coli
ProteinLength	1-552 a.a.
Description	SMAD4 belongs to 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 and may also act as a tumor suppressor.
Sequences of amino acids	MGSSHHHHHH SSGLVPRGSH MDNMSITNTP TSNDACLSIV HSLMCHRQGG ESETFAKRAI ESLVKKLKEK KDELDSLITA ITTNGAHP SK CVTIQRTLDG RLQVAGRKGF PHVIYARLWR WPD LHKNELK HVKYCQYAFD LKCD SVCVNP YHYERVVSPG IDLSGLTLQS NAPSSMMVKD EYVHDFEGQP SLSTEGHSIQ TIQHPPSNRA STETYSTPAL LAPSES NATS TANFPNIPVA STSQPASILG GSHSEGLLQI ASGPQPGQQQ NGFTGQPATY HHNSTTTWTG SRTAPYTPNL PHHQNGHLQH HPPMPHPGH YWPVHNELAF QPPISNHPAP EYWCSIAFFE

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MDVQVGETFK VPSSCPIVTV DGYVDPSSGGD RFCLGQLSNV HRTEAIERAR
 LHIGKGVQLE CKGEGDVWVR CLSDHAVFVQ SYILDREAGR APGDAVHKIY
 PSAYIKVFDL RQCHRQMQQQ AATAQAAAAA QAAAVAGNIP GPGSVGGIAP
 AISLSAAAGI GVDDLRLRCI LRMSFVKGWG PDYPRQSIKE TPCWIEIHLH
 RALQLLDEV L HTMPIADPQP LD

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

Purity > 90% by SDS - PAGE

Concentration 1 mg/ml (determined by Bradford assay)

Storage Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.

GENE INFORMATION

Gene Name [SMAD4 SMAD family member 4 \[Homo sapiens \]](#)

Synonyms SMAD4; SMAD family member 4; JIP; DPC4; MADH4; mothers against decapentaplegic homolog 4; OTTHUMP00000163548; SMAD, mothers against DPP homolog 4; deleted in pancreatic carcinoma locus 4; MAD, mothers against decapentaplegic homolog 4; mothers against decapentaplegic, Drosophila, homolog of, 4; hSMAD4; Deletion target in pancreatic carcinoma 4; MAD, mothers against decapentaplegic homolog 4 (Drosophila); Mothers against DPP homolog 4; SMAD, mothers against DPP homolog 4 (Drosophila)

Gene ID [4089](#)

mRNA Refseq [NM_005359](#)

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Protein Refseq	NP_005350
MIM	600993
UniProt ID	Q13485
Chromosome Location	18q21.1
Pathway	Adherens junction; Cell cycle; Chronic myeloid leukemia; Colorectal cancer; Pancreatic cancer; TGF-beta signaling pathway; Wnt signaling pathway; Signaling by BMP; Signaling by TGF beta
Function	R-SMAD binding; collagen binding; promoter binding; protein homodimerization activity; transcription activator activity; transcription factor activity; transforming growth factor beta receptor, common-partner cytoplasmic mediator activity
PDB rendering based on 1dd1	