

## 32-4865: Recombinant Human SMAD Family Member 2

**Alternative Name :** JV18,MADH2,MADR2,JV18-1,hMAD-2,hSMAD2,MGC22139,MGC34440,SMAD2,Mothers against decapentaplegic homolog 2,Mothers against DPP homolog 2,Mad-related protein 2,SMAD 2,SMAD family member 2.

### Description

Source : Escherichia Coli. SMAD2 Human Recombinant produced in E.Coli is a single, non-glycosylated polypeptide chain containing 487 amino acids (1-467) and having a molecular mass of 54.4 kDa. SMAD2 is fused to 20 amino acid His-Tag at N-Terminus and purified by standard chromatography techniques. SMAD2 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. Phosphorylated SMAD2 is then able to form a complex with SMAD4 or SARA. These complexes accumulate in the cell nucleus, where they are directly participating in the regulation of gene expression. SMAD2 mediates the signal of the TGF-beta, and therefore regulates multiple cellular processes, such as cell proliferation, apoptosis, and differentiation. SMAD2 is recruited to the TGF-beta receptors through its interaction with the SMAD anchor for receptor activation (SARA) protein. TGF-beta 1 acts on adjacent stromal cells to turn on SMAD2 signalling that could lead to stromal decidualization. SMAD2 is the downstream signal transducers of TGF-beta-1 in human dental pulp cells.

### Product Info

**Amount :** 10 µg  
**Purification :** Greater than 95.0% as determined by SDS-PAGE.  
**Content :** The SMAD2 protein solution contains 20mM Tris-HCl pH-8, and 100mM NaCl.  
**Storage condition :** Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid multiple freeze-thaw cycles.  
**Amino Acid :** MGSSHHHHHH SGLVPRGSH MSSILPFTPP VVKRLLGWKK SAGGSGGAGG GEQNGQEEKW  
CEKAVKSLVK KLKKTGRLE LEKAITTQNC NTKCVTIPSTCSEIWGLSTP NTIDQWDTTG LYSFSEQTRS  
LDGRLQVSHR KGLPHVIYCR LWRWPDLSH HELKAIENCE YAFNLKKDEV CVNPHYQRV  
ETPVLPPVLVPRHTEITEL PPLDDYTHSI PENTNFPAGI EPQSNYIPET PPPGYISEDG ETSQQLNQS  
MDTGSPAELS PTLSPVNHS LDLQPVYSE PAFWCSIAYYELNQRVGETF HASQPSLTVD GFTDPSNSER  
FCLGLLSNVN RNATVEMTRR HIGRGVRLYY IGGEVFAECL SDSAIFVQSP NCNQRYGWHP  
ATVCKIPPGCNLKIFNNQEF AALLAQSVNQ GFEAVYQLTR MCTIRMSFVK GWGAEYRRQT VTSTPCWIEL  
HLNGPLQWLD KVLTMGSPS VRCSSMS.

