9051 Mira Mesa Blvd, #910094
San Diego, CA 92191
Tel: 760-390-3989

SMAD2 Human

SMAD Family Member 2 Human Recombinant
RCP2129

Product Overview

Name	SMAD2 Human
Description	
SMAD Family Member 2 Human Recombinant	
Accession (Primary)	Q15796
Synonyms	
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.	
Introduction	
SMAD2 is part of the SMAD family of proteins that mediate signal transduction by the TGF-beta/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.	
Source	
Escherichia Coli.	
Physical Appearance	
Sterile Filtered colorless solution.	
Formulation	
The SMAD2 protein solution contains 20mM Tris-HCl pH-8, and 100mM NaCl.	
Stability	
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.	
Purity	
Greater than 95.0% as determined by SDS-PAGE.	

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Amino acid sequence

MGSSHHHHHH SSGLVPRGSH MSSILPFTPP VVKRLLGWKK SAGGSGGAGG GEQNGQEEKW CEKAVKSLVK KLKKTGRLDE LEKAITTQNC NTKCVTIPSTCSEIWGLSTP NTIDQWDTTG LYSFSEQTRS LDGRLQVSHR KGLPHVIYCR LWRWPDLHSH HELKAIENCE YAFNLKKDEV CVNPYHYQRV ETPVLPPVLVPRHTEILTEL PPLDDYTHSI PENTNFPAGI EPQSNYIPET PPPGYISEDG ETSDQQLNQS MDTGSPAELS PTTLSPVNHS LDLQPVTYSE PAFWCSIAYYELNQRVGETF HASQPSLTVD GFTDPSNSER FCLGLLSNVN RNATVEMTRR HIGRGVRLYY IGGEVFAECL SDSAIFVQSP NCNQRYGWHP ATVCKIPPGCNLKIFNNQEF AALLAQSVNQ GFEAVYQLTR MCTIRMSFVK GWGAEYRRQT VTSTPCWIEL HLNGPLQWLD KVLTQMGSPS VRCSSMS.

Precautions

SMAD2 Human is for research use only and not for use in diagnostic or therapeutic procedures.

Target Information: (Q15796)