

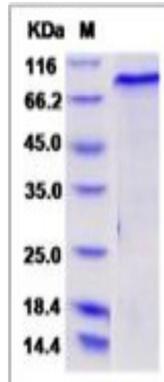
Smad2

Recombinant Mouse SMAD2 (His & GST Tag)

Catalog No.	CRM692A-HisGST CRM692B-HisGST	Quantity:	20 µg 100 µg
Alternate Names:	Mothers against decapentaplegic homolog 2, MAD homolog 2, Mothers against DPP homolog 2, Mad-related protein 2, mMad2, SMAD family member 2, SMAD2		
Description:	SMAD2 is a member of the SMAD family. Members of this family 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. 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. SMAD2 is the downstream signal transducers of TGF-beta-1 in human dental pulp cells. In response to TGF-beta signal, this protein is phosphorylated by the TGF-beta receptors. Phosphorylated SMAD2 is 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.		
UniProt ID:	Q62432-1		
Protein Construction:	A DNA sequence encoding the mouse SMAD2 (Isoform Long) (Ser2-Ser467) was expressed with the N-terminal polyhistidine-tagged GST tag at the N-terminus.		
Source:	Baculovirus-Insect Cells		
Formulation:	Lyophilized from sterile 20mM Tris, 500mM NaCl, pH 8.0, 10% glycerol, 3mM DTT Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization.		
Molecular Weight:	The rmSMAD2/GST chimera consists of 703 aa with a predicted MW of 80 kDa and migrates at ~90 kDa in SDS-PAGE under reducing conditions.		
Purity:	> 90 % as determined by SDS-PAGE.		
Endotoxin Level:	< 1.0 EU per µg of the protein as determined by the LAL method		
Biological Activity:	Testing in progress		
Predicted N-terminal:	Met		
Reconstitution:	Centrifuge vial prior to opening. Add sterile distilled water to a concentration of 0.1 mg/mL and gently pipette the solution up and down the sides of the vial. DO NOT VORTEX. Allow several minutes for complete reconstitution.		
Storage & Stability:	Stable for up to 1 year from date of receipt at -20°C to -80°C After reconstitution, store working aliquots at -20°C to -80°C. Avoid repeated freeze-thaw cycles.		



SDS-PAGE



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