

Datasheet for ABIN6700539 **SMAD4 Protein (GST tag)**



Overview

Quantity:	20 μg	
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Target:	SMAD4	
Origin:	Human	
Source:	Escherichia coli (E. coli)	
Protein Type:	Recombinant	
Purification tag / Conjugate:	This SMAD4 protein is labelled with GST tag.	
Application:	Western Blotting (WB)	

Product Details

Purpose:	SMAD4 recombinant protein-GST fusion protein		
Purification:	Recombinant full-length human SMAD4 was expressed in E. coli cells using an N-Terminal Glutathione-S-Transferase fusion protein. The purity was determined to be >80% by densitometry.		
Purity:	>80%		

Target Details

Target:	SMAD4	
Alternative Name:	SMAD4 (SMAD4 Products)	
Background:	Synonyms: JIP, DPC4, MADH4, Mothers against decapentaplegic homolog 4, MAD homolog 4, Mothers against DPP homolog 4, Deletion target in pancreatic carcinoma 4, SMAD family member 4	

Background: SMAD4 is a member of the SMAD family and mediates signaling by the transforming growth factor-beta (TGF β) superfamily and related ligands (1). TGF β stimulation leads to phosphorylation and activation of SMAD1, SMAD2 and SMAD3, which form complexes with SMAD4 that accumulate in the nucleus and regulate transcription of target genes. SMAD signaling is negatively regulated by inhibitory SMADs and ubiquitin-mediated processes and proteasomal degradation of SMADs depend on the direct interaction of specific E3 ligases with SMADs. SMAD4 is targeted for degradation by multiple ubiquitin ligases that can simultaneously act on R-SMADs and signaling receptors. Such mechanisms of down-regulation of TGF β signaling via degradation of SMADs may be critical for proper physiological response to this pathway (2). SMAD4 Protein is ideal for investigators involved in Signaling Proteins, Transcription Proteins, AKT/PKB Pathway, Angiogenesis, Cancer, Cell Cycle, Cellular Stress, ERK/MAPK Pathway, Inflammation, JAK/STAT Pathway, JNK/SAPK Pathway, NfkB Pathway, and WNT Signaling research.

NCBI Accession:

NM_005359

Pathways:

Cell Division Cycle, Chromatin Binding, Autophagy

Application Details

Application Notes:

Western_Blot_Dilution: User Optimized

Other: Kinase Assay-User Optimized

Application_Note: SMAD4 Protein is suitable for use in Western Blot and Kinase Assay. Expect a band approximately ~95 kDa on specific lysates or tissues. Specific conditions for reactivity should be optimized by the end user.

Restrictions:

For Research Use only

Handling

Format:	Liquid	
Concentration:	0.2 μg/μL	
Buffer:	SMAD4 Protein is stored in 50 mM Tris-HCl, pH 7.5, 150 mM NaCl, 10 mM glutathione, 0.1 mM EDTA, 0.25 mM DTT, 0.1 mM PMSF, 25 % glycerol.	
Storage:	-80 °C	
Storage Comment:	Store product at -70°C. For optimal storage, aliquot target into smaller quantities after	
	centrifugation and store at recommended temperature. For most favorable performance, avoid	

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repeated handling and multiple freeze/thaw cycles.

Expiry Date: 12 months