

Datasheet for ABIN6700545
SMAD2 Protein (GST tag)



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Overview

Quantity:	20 µg
Target:	SMAD2
Origin:	Human
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Purification tag / Conjugate:	This SMAD2 protein is labelled with GST tag.
Application:	Western Blotting (WB)

Product Details

Purpose:	SMAD2 recombinant protein-GST fusion protein
Purification:	Recombinant full-length human SMAD2 was expressed in E. coli cells using an N-Terminal Glutathione-S-Transferase fusion protein. The purity was determined to be >90% by densitometry.
Purity:	>90%

Target Details

Target:	SMAD2
Alternative Name:	SMAD2 (SMAD2 Products)
Background:	Synonyms: JV18, MADH2, MADR2, JV18-1, hMAD-2, hSMAD2, MGC22139, MGC34440, Mothers against decapentaplegic homolog 2, MAD homolog 2, Mothers against DPP homolog 2, JV18-1, Mad-related protein 2, hMAD-2, SMAD family member 2, SMAD2

Target Details

Background: SMADs are essential intracellular components for the signal transduction of TGF β family members. SMAD2 is an intracellular mediator of TGF β family and activin type 1 receptor (1). SMAD2 mediate TGF β signaling to regulate cell growth and differentiation. SMAD2 is released from cytoplasmic retention by TGF β receptor-mediated phosphorylation. The phosphorylated SMAD2 then forms a heterodimeric complex with SMAD4, and this complex translocates from cytoplasm into nucleus. By interacting with DNA-binding proteins, SMAD2 complexes then positively or negatively regulate the transcription of target genes. Inactivating mutations in SMAD2 have been found in various cancers (2). SMAD2 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, Nf κ B Pathway, and WNT Signaling research.

NCBI Accession: [NM_001003652](#)

Pathways: [Cell Division Cycle](#), [Hormone Transport](#), [Chromatin Binding](#), [Protein targeting to Nucleus](#)

Application Details

Application Notes: Western_Blot_Dilution: User Optimized
Other: Kinase Assay-User Optimized
Application_Note: SMAD2 Protein is suitable for use in Western Blot and Kinase Assay. Expect a band approximately ~90 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 μ g/ μ L

Buffer: SMAD2 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 $^{\circ}$ C

Storage Comment: Store product at -70 $^{\circ}$ C. For optimal storage, aliquot target into smaller quantities after centrifugation and store at recommended temperature. For most favorable performance, avoid repeated handling and multiple freeze/thaw cycles.

Expiry Date: 12 months