

Datasheet for ABIN6700547
SMAD3 Protein (GST tag)



[Go to Product page](#)

Overview

Quantity:	20 µg
Target:	SMAD3
Origin:	Human
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Purification tag / Conjugate:	This SMAD3 protein is labelled with GST tag.
Application:	Western Blotting (WB)

Product Details

Purpose:	SMAD3 recombinant protein-GST fusion protein
Purification:	Recombinant full-length human SMAD3 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:	SMAD3
Alternative Name:	SMAD3 (SMAD3 Products)
Background:	Synonyms: MADH3, JV15-2, HSPC193, HsT17436, MGC60396, DKFZP586N0721, DKFZp686J10186, Mothers against decapentaplegic homolog 3, MAD homolog 3, Mad3, Mothers against DPP homolog 3, hMAD-3, JV15-2

Target Details

Background: SMAD3 is a direct mediator of transcriptional activation by the TGF β receptor. The activity of SMAD3 is regulated by the TGF β receptors, and SMAD3 is phosphorylated and associated with the ligand-bound receptor complex. TGF β stimulation leads to phosphorylation and activation of SMAD3, which form a complex with SMAD4 that accumulate in the nucleus and regulate transcription of target genes such as CDK inhibitor (1). SMAD3 containing a C-terminal truncation acts as a dominant-negative inhibitor of the normal TGF β response. SMAD3 is a major physiologic substrate of the G1 cyclin-dependent kinases CDK4 and CDK2 (2). SMAD3 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_005902](#)

Pathways: [Cell Division Cycle](#), [Chromatin Binding](#), [Cell-Cell Junction Organization](#), [Positive Regulation of Endopeptidase Activity](#), [Autophagy](#)

Application Details

Application Notes: Western_Blot_Dilution: User Optimized
Other: Kinase Assay-User Optimized
Application_Note: SMAD3 Protein is suitable for use in Western Blot and Kinase Assay. Expect a band approximately ~77 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: SMAD3 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.

Handling

Expiry Date: 12 months