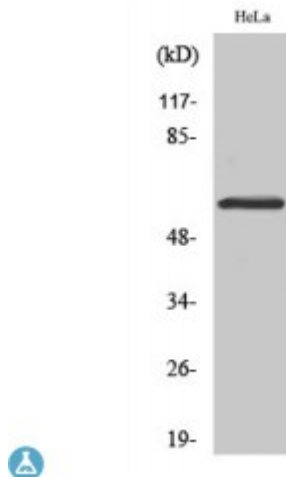


Anti-Smad1/5/9 antibody



Description	Rabbit polyclonal to Smad1/5/9.
Model	STJ95690
Host	Rabbit
Reactivity	Human, Mouse, Rat
Applications	ELISA, IHC, WB
Immunogen	Synthesized peptide derived from human Smad1/5/9
Immunogen Region	10-90 aa, N-terminal
Gene ID	4086
Gene Symbol	SMAD1
Dilution range	WB 1:500-1:2000IHC 1:100-1:300ELISA 1:10000
Specificity	Smad1/5/9 Polyclonal Antibody detects endogenous levels of Smad1/5/9 protein.
Tissue Specificity	Ubiquitous. Highest expression seen in the heart and skeletal muscle.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Note	For Research Use Only (RUO).
Protein Name	Mothers against decapentaplegic homolog 1 MAD homolog 1 Mothers against DPP homolog 1 JV4-1 Mad-related protein 1 SMAD family member 1 SMAD 1 Smad1 hSMAD1 Transforming growth factor-beta-signaling prot
Molecular Weight	56 kDa

Clonality	Polyclonal
Conjugation	Unconjugated
Isotype	IgG
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Concentration	1 mg/ml
Storage Instruction	Store at -20°C, and avoid repeat freeze-thaw cycles.
Database Links	HGNC:6767OMIM:601595
Alternative Names	Mothers against decapentaplegic homolog 1 MAD homolog 1 Mothers against DPP homolog 1 JV4-1 Mad-related protein 1 SMAD family member 1 SMAD 1 Smad1 hSMAD1 Transforming growth factor-beta-signaling prot
Function	Transcriptional modulator activated by BMP (bone morphogenetic proteins) type 1 receptor kinase. SMAD1 is a receptor-regulated SMAD (R-SMAD). SMAD1/OAZ1/PSMB4 complex mediates the degradation of the CREBBP/EP300 repressor SNIP1. May act synergistically with SMAD4 and YY1 in bone morphogenetic protein (BMP)-mediated cardiac-specific gene expression.
Sequence and Domain Family	The MH2 domain mediates phosphorylation-dependent trimerization through L3 loop binding of phosphoserines in the adjacent subunit.
Cellular Localization	Cytoplasm Nucleus. Cytoplasmic in the absence of ligand. Migrates to the nucleus when complexed with SMAD4 . Co-localizes with LEMD3 at the nucleus inner membrane . Exported from the nucleus to the cytoplasm when dephosphorylated .
Post-translational Modifications	Phosphorylation of the C-terminal SVS motif by BMP type 1 receptor kinase activates SMAD1 by promoting dissociation from the receptor and trimerization with SMAD4. Ubiquitinated by SMAD-specific E3 ubiquitin ligase SMURF1, leading to its degradation. Monoubiquitinated, leading to prevent DNA-binding. Deubiquitination by USP15 alleviates inhibition and promotes activation of TGF-beta target genes. Dephosphorylation, probably by PPM1A, induces its export from the nucleus to the cytoplasm .