

## Basic Information

Product Name	Anti-SMAD1 Antibody
Gene Name	SMAD1
Source	Rabbit
Clonality	Polyclonal
Isotype	IgG
Species Reactivity	human, mouse, rat
Tested Application	WB
Contents	500 ug/ml antibody with PBS, 0.02% NaN <sub>3</sub> , 1 mg/ml BSA and 50% glycerol.
Immunogen	A synthetic peptide corresponding to a sequence in the middle region of human SMAD1 different from the related mouse sequence by two amino acids, and from the related rat sequence by five amino acids.
Concentration	500 ug/ml
Purification	Immunogen affinity purified.
Observed MW	52 kDa
Dilution Ratios	Western blot (WB):1:500-2000

## Storage

12 months from date of receipt, -20°C as supplied.

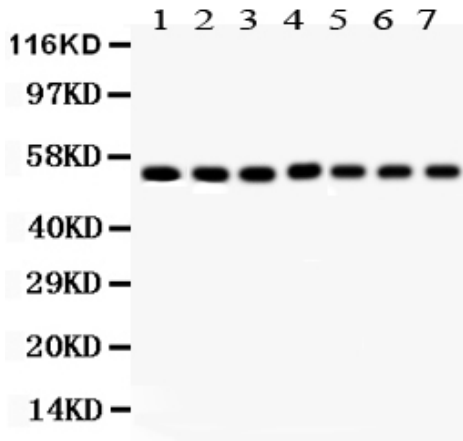
## Background Information

SMADs are proteins that modulate the activity of transforming growth factor beta ligands. The SMADs, often in complex with other SMADs/CoSMAD, act as transcription factors that regulate the expression of certain genes. It was concluded that targeted ubiquitination of SMADs may serve to control both embryonic development and a wide variety of cellular responses to TGF-beta signals. R-Smads or receptor regulated Smads are a class of proteins that include SMAD1, SMAD2, SMAD3, SMAD5, and SMAD8. In response to signals by the TGF- $\beta$  superfamily of ligands these proteins associate with receptor kinases and are phosphorylated at an SSXS motif at their extreme C-terminus. These proteins then typically bind to the common mediator Smad or co-SMAD SMAD4.

## Reference

Anti-SMAD1 Antibody被引用在1文献中。

## Selected Validation Data



Western blot analysis of SMAD1 using anti-SMAD1 antibody (PB0444). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: Rat Cardiac Muscle tissue lysates,

Lane 2: Mouse Cardiac Muscle tissue lysates,

Lane 3: Rat Skeletal Muscle tissue lysates,

Lane 4: Mouse Skeletal Muscle tissue lysates,

Lane 5: 293T whole cell lysates,

Lane 6: MCF-7 whole cell lysates,

Lane 7: HELA whole cell lysates.

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-SMAD1 antigen affinity purified polyclonal antibody (PB0444) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for SMAD1 at approximately 52 kDa. The expected band size for SMAD1 is at 52 kDa.