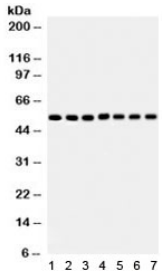
SMAD Antibody [SMAD1-5] (R32238)

Catalog No.	Formulation	Size
R32238	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Predicted Reactivity	Hamster
Format	Antigen affinity purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2.5% BSA and 0.025% sodium azide
UniProt	Q15797
Localization	Nuclear and cytoplasmic
Applications	Western Blot : 0.1-0.5ug/ml
Limitations	This SMAD antibody is available for research use only.



Western blot testing of 1) rat heart, 2) mouse heart, 3) rat skeletal muscle, 4) mouse skeletal muscle, 5) 293, 6) MCF7 and 7) HeLa lysate with SMAD antibody. Expected molecular weight of SMADs 1-5: 48~60 kDa, observed here at ~52 kDa.

Description

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.

Application Notes

Optimal dilution of the SMAD antibody should be determined by the researcher.

Immunogen

Amino acids QPMDTNMMAPPLPSEINRGDVQAVAYEEPKH of human SMAD1-5 were used as the immunogen for the SMAD antibody.

Storage

After reconstitution, the SMAD antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.