## SMAD3 Monoclonal Antibody

| Catalog No. | E-AB-22121 | Reactivity | H,M,R |
| :--- | :--- | :--- | :--- |
| Storage | Store at $-20^{\circ}$ C. Avoid freeze / thaw cycles. | Host | Mouse |
| Applications | WB,IHC-p | Isotype | IgG |

Note: Centrifuge before opening to ensure complete recovery of vial contents.

## Images



Western Blot analysis of 1) 293T, 2) Jurkat, 3) Rat heart, 4) Mouse heart using Smad3 Monoclonal Antibody at dilution of 1:2000.


Immunohistochemistry of paraffinembedded Human colon carcinoma tissue using Smad3 Monoclonal Antibody at dilution of 1:200.

## Immunogen Information

Immunogen Recombinant Protein
Swissprot P84022
Synonyms
SMAD3,MADH3,Mothers against decapentaplegic homolog 3,MAD homolog 3,Mad3,Mothers against DPP homolog 3,hMAD-3,JV15-2,SMAD family member 3,SMAD 3,Smad3,hSMAD3

## Product Information

Observed MW 52 kDa
Buffer PBS with $0.02 \%$ sodium azide, $0.5 \%$ BSA and $50 \%$ glycerol, pH 7.4
Purify Protein A purification
Clone No. Clone:6F3
Dilution WB 1:1000-2000, IHC 1:100-200

## Background

Receptor-regulated SMAD (R-SMAD) that is an intracellular signal transducer and transcriptional modulator activated by TGF-beta (transforming growth factor) and activin type 1 receptor kinases. Binds the TRE element in the promoter region of many genes that are regulated by TGF-beta and, on formation of the SMAD3/SMAD4 complex, activates transcription. Also can form a SMAD3/SMAD4/JUN/FOS complex at the AP-1/SMAD site to regulate TGF-beta-mediated transcription. Has an inhibitory effect on wound healing probably by modulating both growth and migration of primary keratinocytes and by altering the TGF-mediated chemotaxis of monocytes. This effect on wound healing appears to be hormone-sensitive. Regulator of chondrogenesis and osteogenesis and inhibits early healing of bone fractures. Positively regulates PDPK1 kinase activity by stimulating its dissociation from the 14-3-3 protein YWHAQ which acts as a negative regulator.

