## For Research Use Only

## SMAD3 Polyclonal antibody

Catalog Number:51145-1-AP 13 Publications



**Purification Method:** 

Antigen affinity purification

**Basic Information** 

Catalog Number: 51145-1-AP

Concentration:

240 µg/ml Source:

Rabbit Isotype:

IgG

GenBank Accession Number:

BC050743

GeneID (NCBI):

4088

UNIPROT ID: P84022 Full Name:

SMAD family member 3

Calculated MW:

48 kDa

Applications

**Tested Applications:** 

**ELISA** 

Cited Applications:

WB

Species Specificity:

human

Cited Species:

human, mouse, rat

## **Background Information**

SMAD family member 3 (SMAD3), also named Mothers against decapentaplegic homolog 3. 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 (By similarity). Positively regulates PDPK1 kinase activity by stimulating its dissociation from the 14-3-3 protein YWHAQ which acts as a negative regulator. The observed molecular weight of SMAD3 is about 48 kDa.

## **Notable Publications**

| Author       | Pubmed ID | Journal                | Application |
|--------------|-----------|------------------------|-------------|
| Xiaomeng Zou | 36411770  | Biomed Res Int         | WB          |
| Fangmin Zhou | 35968503  | Dis Markers            | WB          |
| Sha Xiao     | 39955865  | Ecotoxicol Environ Saf | WB          |

Storage

Storage:

Store at -20°C.

Storage Buffer

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

Selected Validation Data