For Research Use Only

SMAD3 Polyclonal antibody

Catalog Number:51145-1-AP 12 Publications



Purification Method:

Antigen affinity purification

Basic Information

Catalog Number:

51145-1-AP

150ul , Concentration: 240 $\mu g/ml$ by Bradford method using BSA as the

standard; Source:

Rabbit

Isotype:

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-betamediated 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
Bin-Bin Zhang	39929325	Exp Gerontol	WB

Storage

Storage:

Store at -20°C.

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

Selected Validation Data