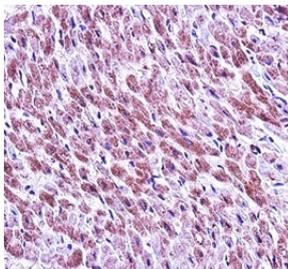


SMAD3 Antibody (F43048)

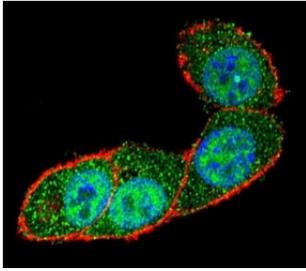
Catalog No.	Formulation	Size
F43048-0.4ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.4 ml
F43048-0.08ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.08 ml

[Bulk quote request](#)

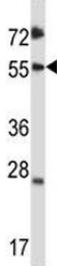
Availability	1-3 business days
Species Reactivity	Human
Predicted Reactivity	Mouse, Rat, Pig, Chicken
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Purity	Antigen affinity
UniProt	P84022
Applications	Western Blot : 1:1000 Immunofluorescence : 1:10-1:50 IHC (Paraffin) : 1:10-1:50
Limitations	This SMAD3 antibody is available for research use only.



SMAD3 antibody immunohistochemistry analysis in formalin fixed and paraffin embedded human heart tissue.



Confocal immunofluorescent analysis of SMAD3 antibody with HeLa cells followed by Alexa Fluor 488-conjugated goat anti-rabbit IgG (green). Actin filaments have been labeled with Alexa Fluor 555 Phalloidin (red). DAPI was used as a nuclear counterstain (blue).



SMAD3 antibody western blot analysis in CEM lysate. Observed molecular weight: 48~55 kDa.

Description

SMAD3 is a 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. [UniProt]

Application Notes

Titration of the SMAD3 antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

A portion of amino acids 127-156 from the human protein was used as the immunogen for this SMAD3 antibody.

Storage

Aliquot the SMAD3 antibody and store frozen at -20°C or colder. Avoid repeated freeze-thaw cycles.