# **Elabscience**®

## Phospho-SMAD3 (Ser425) Monoclonal Antibody

#### catalog number: E-AB-51043

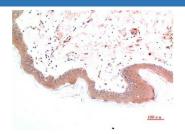
Note: Centrifuge before opening to ensure complete recovery of vial contents.

Description		
Reactivity	Human;Mouse;Rat	
Immunogen	Synthetic Peptide of Phospho-Smad3 (Ser425)	
Host	Mouse	
Isotype	IgG	
Clone	4C5	
Purification	Protein A purification	
Buffer	Phosphate buffered solution, pH 7.4, containing 0.05% stabilizer, 0.5% protein protectant and 50% glycerol.	
Applications	Recommended Dilution	

1:50-300
1.30-300

Data

IHC



Immunohistochemistry of paraffin-embedded Human skin tissue using Phospho-SMAD3 (Ser425) Monoclonal Antibody at dilution of 1:200

Preparation & Storage	
Storage	Store at -20°C Valid for 12 months. Avoid freeze / thaw cycles.
Shipping	The product is shipped with ice pack, upon receipt, store it immediately at the
	temperature recommended.

#### 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.

### For Research Use Only