ARG53570
anti-Smad 3 antibody

Package: 500 µl, 250 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes Smad 3
Tested Reactivity	Hu, Ms, Rat
Tested Application	ChIP, ICC/IF, IHC-Fr, IHC-P, IP, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	Smad 3
Antigen Species	Human
Immunogen	Synthetic peptide corresponding to internal region of human Smad3.
Conjugation	Un-conjugated
Alternate Names	JV15-2; SMAD 3; MADH3; Mothers against decapentaplegic homolog 3; LDS3; Smad3; HsT17436; Mothers against DPP homolog 3; hSMAD3; Mad3; HSPC193; hMAD-3; SMAD family member 3; LDS1C; MAD homolog 3

Application Instructions

Application table

Application	Dilution
ChIP	Assay-Dependent
ICC/IF	1:100 - 1:200
IHC-Fr	Assay-Dependent
IHC-P	1:100
IP	Assay-Dependent
WB	1:500 - 1:3000

Application Note	IHC-P: Antigen Retrieval: Boil tissue section in 10 mM Citrate buffer (pH 6.0) for 10 min followed by cooling at RT for 20 min. * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.
Positive Control	Breast, Breast Carcinoma
Calculated Mw	48 kDa

Properties

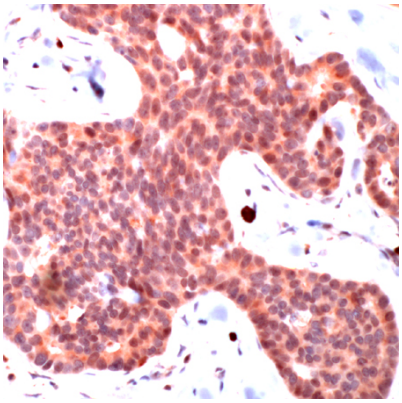
Form	Liquid
Purification	Immunogen affinity purified

Buffer	PBS (pH 7.6), 1% BSA and < 0.1% Sodium azide
Preservative	< 0.1% Sodium azide
Stabilizer	1% BSA
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

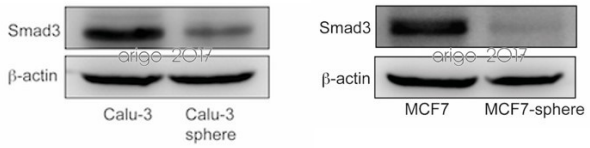
Gene Symbol	SMAD3
Gene Full Name	SMAD family member 3
Background	The protein encoded by this gene belongs to the SMAD, a family of proteins similar to the gene products of the Drosophila gene 'mothers against decapentaplegic' (Mad) and the C. elegans gene Sma. SMAD proteins are signal transducers and transcriptional modulators that mediate multiple signaling pathways. This protein functions as a transcriptional modulator activated by transforming growth factor-beta and is thought to play a role in the regulation of carcinogenesis. [provided by RefSeq, Apr 2009]
Function	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]
Highlight	Related products: Smad3 antibodies; Anti-Rabbit IgG secondary antibodies; Related news: Tools for studying H. pylori diseases
Research Area	Cancer antibody; Developmental Biology antibody; Gene Regulation antibody; Metabolism antibody; Signaling Transduction antibody
Cellular Localization	Nucleus

Images



ARG53570 anti-Smad 3 antibody IHC-P image

Immunohistochemistry: Human Breast Carcinoma stained with ARG53570 anti-Smad 3 antibody.



ARG53570 anti-Smad 3 antibody WB image

Western blot: 40 µg of Calu-3, Calu-3-sphere, MCF7 and MCF-sphere stained with ARG53570 anti-Smad 3 antibody at 1:1000 dilution.