



Smad3 (phospho Ser425) rabbit pAb

Cat No.:ES1459

For research use only

Overview

Product Name	Smad3 (phospho Ser425) rabbit pAb
Host species	Rabbit
Applications	IF;WB;IHC;ELISA
Species Cross-Reactivity	Human;Mouse;Rat
Recommended dilutions	IF: 1:50-200 Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. ELISA: 1/40000. Not yet tested in other applications.
Immunogen	The antiserum was produced against synthesized peptide derived from human Smad3 around the phosphorylation site of Ser425. AA range:376-425
Specificity	Phospho-Smad3 (S425) Polyclonal Antibody detects endogenous levels of Smad3 protein only when phosphorylated at S425.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Storage	Store at -20°C. Avoid repeated freeze-thaw cycles.
Protein Name	Mothers against decapentaplegic homolog 3
Gene Name	SMAD3
Cellular localization	Cytoplasm . Nucleus . Cytoplasmic and nuclear in the absence of TGF-beta. On TGF-beta stimulation, migrates to the nucleus when complexed with SMAD4 (PubMed:15799969, PubMed:21145499). Through the action of the phosphatase PPM1A, released from the SMAD2/SMAD4 complex, and exported out of the nucleus by interaction with RANBP1 (PubMed:16751101, PubMed:19289081). Co-localizes with LEMD3 at the nucleus inner membrane (PubMed:15601644). MAPK-mediated phosphorylation appears to have no effect on nuclear import (PubMed:19218245). PDPK1 prevents its nuclear translocation in response to TGF-beta (PubMed:17327236). Localized mainly to the nucleus in the early stages of embryo





Purification

development with expression becoming evident in the cytoplasm of the inner cell mass at the blastocyst stage (By similarity)

The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.

Clonality

Polyclonal

Concentration

1 mg/ml

Observed band

58kD

Human Gene ID

4088

Human Swiss-Prot Number

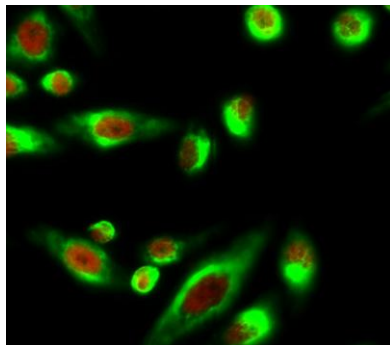
P84022

Alternative Names

SMAD3; MADH3; Mothers against decapentaplegic homolog 3; MAD homolog 3; Mad3; Mothers against DPP homolog 3; hMAD-3; JV15-2; SMAD family member 3; SMAD 3; Smad3; hSMAD3

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],

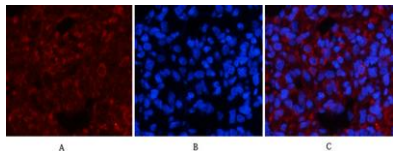


Immunofluorescence analysis of HeLa cell. 1,Smad3 (phospho Ser425) Polyclonal Antibody(red) was diluted at 1:200(4° overnight). ATG5 mouse Monoclonal Antibody(3C7)(green) was diluted at 1:200(4° overnight). 2, Goat Anti Rabbit Alexa Fluor 594 Catalog:RS36

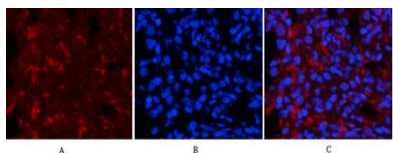




Immunofluorescence analysis of rat-lung tissue. 1,Smad3 (phospho Ser425) Polyclonal Antibody(red) was diluted at 1:200(4°C,overnight). 2, Cy3 labeled Secondary antibody was diluted at 1:300(room temperature, 50min).3, Picture B: DAPI(blue) 10min. Picture A:Target. Picture C: merge of A+B



Immunofluorescence analysis of rat-lung tissue. 1,Smad3 (phospho Ser425) Polyclonal Antibody(red) was diluted at 1:200(4°C,overnight). 2, Cy3 labeled Secondary antibody was diluted at 1:300(room temperature, 50min).3, Picture B: DAPI(blue) 10min. Picture A



Immunofluorescence analysis of mouse-kidney tissue. 1,Smad3 (phospho Ser425) Polyclonal Antibody(red) was diluted at 1:200(4°C,overnight). 2, Cy3 labeled Secondary antibody was diluted at 1:300(room temperature, 50min).3, Picture B: DAPI(blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B

