

**Smad3 (phospho Ser425) rabbit pAb****Cat#: orb764334 (Manual)**

For research use only. Not intended for diagnostic use.

<b>Product Name</b>	Smad3 (phospho Ser425) rabbit pAb
<b>Host species</b>	Rabbit
<b>Applications</b>	IF;WB;IHC;ELISA
<b>Species Cross-Reactivity</b>	Human;Mouse;Rat
<b>Recommended dilutions</b>	IF: 1:50-200 Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. ELISA: 1/40000. Not yet tested in other applications.
<b>Immunogen</b>	The antiserum was produced against synthesized peptide derived from human Smad3 around the phosphorylation site of Ser425. AA range:376-425
<b>Specificity</b>	Phospho-Smad3 (S425) Polyclonal Antibody detects endogenous levels of Smad3 protein only when phosphorylated at S425.
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide..
<b>Storage</b>	Store at -20°C. Avoid repeated freeze-thaw cycles.
<b>Protein Name</b>	Mothers against decapentaplegic homolog 3
<b>Gene Name</b>	SMAD3
<b>Cellular localization</b>	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 development with expression becoming evident in the

cytoplasm of the inner cell mass at the blastocyst stage (By similarity)

**Purification**

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**

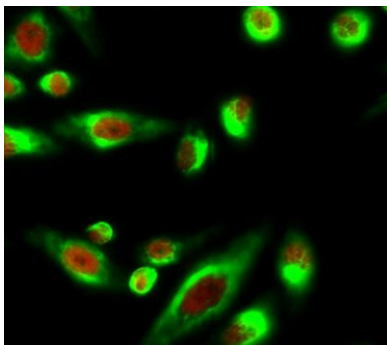
P84022

**Alternative Names**

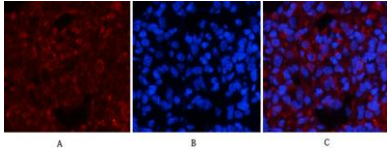
SMAD3; MADH3; Mothers against decapentaplegic homolog 3; MAD homolog 3; Mad3; Mothers against DPP homolog 3; hMAD-3; JV15-2; SMAD family member 3; SMAD 3; Smad3; hSMAD3

**Background**

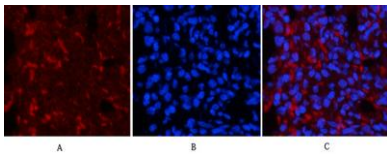
The protein encoded by this gene belongs to the SMAD, a family of proteins similar to the gene products of the Drosophila gene 'mothers against decapentaplegic' (Mad) and the C. elegans gene Sma. SMAD proteins are signal transducers and transcriptional modulators that mediate multiple signaling pathways. 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],



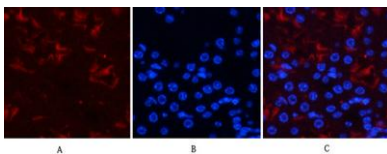
**Immunofluorescence analysis of HeLa cell. 1, Smad3 (phospho Ser425) Polyclonal Antibody (red) was diluted at 1:200 (4° overnight). ATG5 mouse Monoclonal Antibody (3C7) (green) was diluted at 1:200 (4° overnight). 2, Goat Anti Rabbit Alexa Fluor 594 Catalog:RS3611 was diluted at 1:1000 (room temperature, 50min). Goat Anti Mouse Alexa Fluor 488 Catalog:RS3208 was diluted at 1:1000 (room temperature, 50min).**



**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 B: DAPI. 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:Target. Picture B: DAPI. Picture C: merge of A+B**



**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**