



Smad3 rabbit pAb

Cat No.:ES3463

For research use only

Overview

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|---------------------------------|---|
| Product Name | Smad3 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: 1/10000. Not yet tested in other applications. |
| Immunogen | The antiserum was produced against synthesized peptide derived from human Smad3. AA range:145-194 |
| Specificity | Smad3 Polyclonal Antibody detects endogenous levels of Smad3 protein. |
| 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 development with expression becoming evident in |





Purification

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

50kD

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],

