

Product Name: Smad3 (phospho Thr179) Rabbit Polyclonal Antibody
Catalog #: APRab05449

Summary

Production Name	Smad3 (phospho Thr179) Rabbit Polyclonal Antibody
Description	Rabbit Polyclonal Antibody
Host	Rabbit
Application	IHC,WB,ELISA
Reactivity	Human,Mouse,Rat

Performance

Conjugation	Unconjugated
Modification	Phospho Antibody
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
Buffer	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Purification	Affinity purification

Immunogen

Gene Name	SMAD3 SMAD3; MADH3; Mothers against decapentaplegic homolog 3; MAD homolog 3;
Alternative Names	Mad3; Mothers against DPP homolog 3; hMAD-3; JV15-2; SMAD family member 3; SMAD 3; Smad3; hSMAD3
Gene ID	4088.0
SwissProt ID	P84022.The antiserum was produced against synthesized peptide derived from human Smad3 around the phosphorylation site of Thr179. AA range:145-194

Application

Dilution Ratio	WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:10000..
Molecular Weight	50kD

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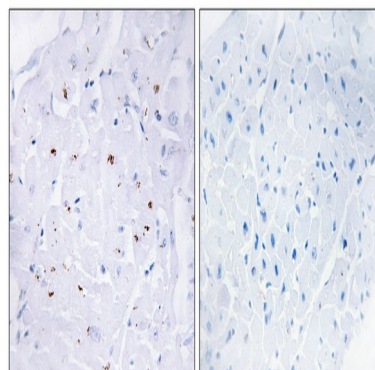
Background

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],disease:Defects in SMAD3 may be a cause of colorectal cancer (CRC) [MIM:114500],domain:The MH2 domain is sufficient to carry protein nuclear export.,function:Transcriptional modulator activated by TGF-beta (transforming growth factor) and activin type 1 receptor kinase. SMAD3 is a receptor-regulated SMAD (R-SMAD),PTM:Phosphorylated on serine by TGF-beta and activin type 1 receptor kinases.,similarity:Belongs to the dwarfin/SMAD family.,similarity:Contains 1 MH1 (MAD homology 1) domain.,similarity:Contains 1 MH2 (MAD homology 2) domain.,subcellular location:In the cytoplasm in the absence of ligand. Migration to the nucleus when complexed with Smad4.,subunit:Interacts with HGS. Interacts with NEDD4L in response to TGF-beta. Interacts with TTRAP (By similarity). Interacts with SARA (SMAD anchor for receptor activation); form trimers with another SMAD3 and the co-SMAD SMAD4. Interacts with JUN/FOS, vitamin D receptor, homeobox protein TGIF and TGIF2, PEBP2-alpha C subunit, CREB-binding protein (CBP), p300, SKI, SNON, ATF2, SMURF2, AIP1, DACH1 and TGFB11. Part of a complex consisting of AIP1, ACVR2A, ACVR1B and SMAD3. Found in a complex with SMAD2 and TRIM33 upon addition of TGF-beta. Interacts with SMAD2 and TRIM33. Found in a complex with SMAD3, Ran and XPO4. Interacts with XPO4. Interacts with LBXCOR1 and CORL2.,

Research Area

Cell_Cycle_G1S;Cell_Cycle_G2M_DNA;WNT;WNT-T CELLTGF-beta;Adherens_Junction;Pathways in cancer;Colorectal cancer;Pancreatic cancer;Chronic myeloid leukemia;

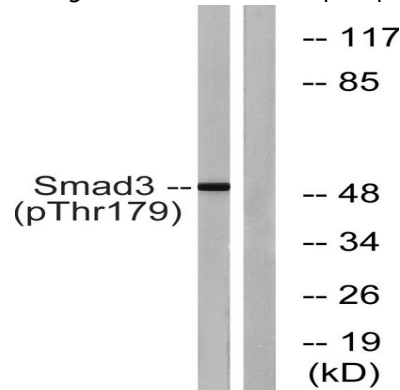
Image Data



Immunohistochemistry analysis of paraffin-embedded human heart, using Smad3 (Phospho-Thr179) Antibody. The

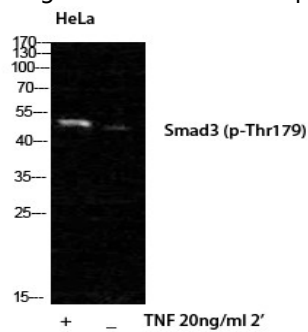
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picture on the right is blocked with the phospho peptide.



Western blot analysis of lysates from HeLa cells treated with TNF 20ng/ml 2', using Smad3 (Phospho-Thr179) Antibody.

The lane on the right is blocked with the phospho peptide.



Western Blot analysis of HELA cells using Phospho-Smad3 (T179) Polyclonal Antibody

Note

For research use only.