

Smad4 Rabbit pAb

Catalog No.: A5657 **7 Publications**

Basic Information

Observed MW

63kDa

Calculated MW

60kDa

Category

Primary antibody

Applications

ELISA, WB, IHC-P, IF/ICC

Cross-Reactivity

Human, Mouse, Rat

Background

This gene encodes a member of the Smad family of signal transduction proteins. Smad proteins are phosphorylated and activated by transmembrane serine-threonine receptor kinases in response to transforming growth factor (TGF)-beta signaling. The product of this gene forms homomeric complexes and heteromeric complexes with other activated Smad proteins, which then accumulate in the nucleus and regulate the transcription of target genes. This protein binds to DNA and recognizes an 8-bp palindromic sequence (GTCTAGAC) called the Smad-binding element (SBE). The protein acts as a tumor suppressor and inhibits epithelial cell proliferation. It may also have an inhibitory effect on tumors by reducing angiogenesis and increasing blood vessel hyperpermeability. The encoded protein is a crucial component of the bone morphogenetic protein signaling pathway. The Smad proteins are subject to complex regulation by post-translational modifications. Mutations or deletions in this gene have been shown to result in pancreatic cancer, juvenile polyposis syndrome, and hereditary hemorrhagic telangiectasia syndrome.

Recommended Dilutions

WB	1:500 - 1:2000
IHC-P	1:50 - 1:200
IF/ICC	1:50 - 1:200

Immunogen Information

Gene ID

4089

Swiss Prot

Q13485

Immunogen

Recombinant fusion protein containing a sequence corresponding to amino acids 320-552 of human Smad4 (NP_005350.1).

Synonyms

JIP; DPC4; MADH4; MYHRS; Smad4

Contact

 | www.abclonal.com

Product Information

Source

Rabbit

Isotype

IgG

Purification

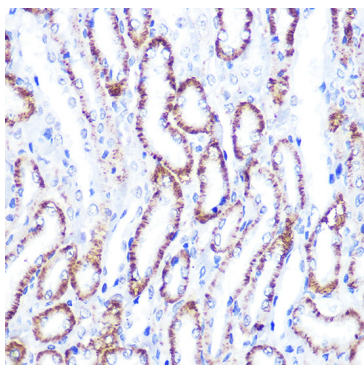
Affinity purification

Storage

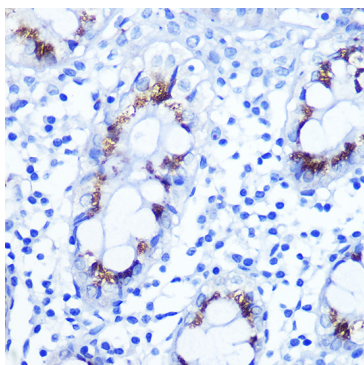
Store at -20°C. Avoid freeze / thaw cycles.

Buffer: PBS with 0.01% thimerosal, 50% glycerol, pH7.3.

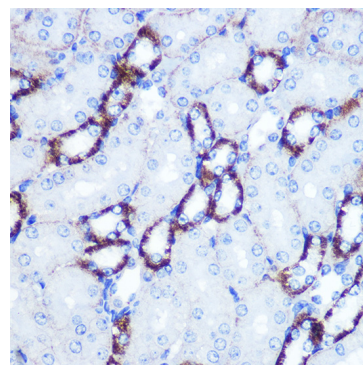
Validation Data



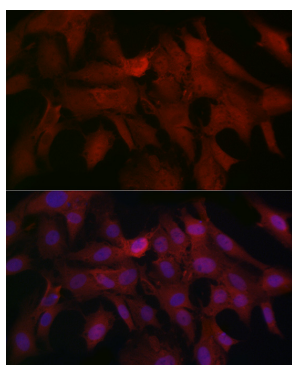
Immunohistochemistry analysis of Smad4 in paraffin-embedded rat kidney using Smad4 Rabbit pAb (A5657) at dilution of 1:100 (40x lens). Perform microwave antigen retrieval with 10 mM PBS buffer pH 7.2 before commencing with IHC staining protocol.



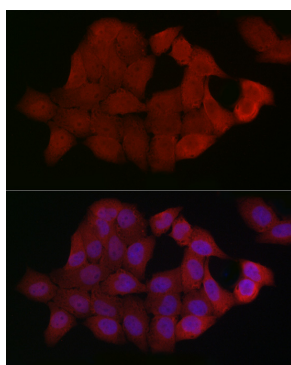
Immunohistochemistry analysis of Smad4 in paraffin-embedded human colon using Smad4 Rabbit pAb (A5657) at dilution of 1:100 (40x lens). Perform microwave antigen retrieval with 10 mM PBS buffer pH 7.2 before commencing with IHC staining protocol.



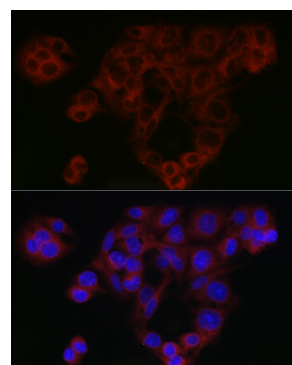
Immunohistochemistry analysis of Smad4 in paraffin-embedded mouse kidney using Smad4 Rabbit pAb (A5657) at dilution of 1:100 (40x lens). Perform microwave antigen retrieval with 10 mM PBS buffer pH 7.2 before commencing with IHC staining protocol.



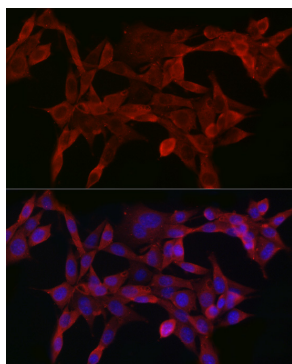
Immunofluorescence analysis of C6 cells using Smad4 Rabbit pAb (A5657) at dilution of 1:50 (40x lens). Secondary antibody: Cy3 Goat Anti-Rabbit IgG (H+L) (AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.



Immunofluorescence analysis of HeLa cells using Smad4 Rabbit pAb (A5657) at dilution of 1:50 (40x lens). Secondary antibody: Cy3 Goat Anti-Rabbit IgG (H+L) (AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.



Immunofluorescence analysis of HepG2 cells using Smad4 Rabbit pAb (A5657) at dilution of 1:50 (40x lens). Secondary antibody: Cy3 Goat Anti-Rabbit IgG (H+L) (AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.



Immunofluorescence analysis of NIH/3T3 cells using Smad4 Rabbit pAb (A5657) at dilution of 1:50 (40x lens). Secondary antibody: Cy3 Goat Anti-Rabbit IgG (H+L) (AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.