

Smad2 Rabbit pAb

Catalog No.: A16912

Basic Information

Observed MW

60kDa

Calculated MW

52kDa

Category

Primary antibody

Applications

ELISA, WB, IHC-P, IF/ICC

Cross-Reactivity

Human, Mouse, Rat

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 mediates the signal of the transforming growth factor (TGF)-beta, and thus regulates multiple cellular processes, such as cell proliferation, apoptosis, and differentiation. This protein is recruited to the TGF-beta receptors through its interaction with the SMAD anchor for receptor activation (SARA) protein. In response to TGF-beta signal, this protein is phosphorylated by the TGF-beta receptors. The phosphorylation induces the dissociation of this protein with SARA and the association with the family member SMAD4. The association with SMAD4 is important for the translocation of this protein into the nucleus, where it binds to target promoters and forms a transcription repressor complex with other cofactors. This protein can also be phosphorylated by activin type 1 receptor kinase, and mediates the signal from the activin. Alternatively spliced transcript variants have been observed for this gene.

Recommended Dilutions

WB	1:500 - 1:1000
IHC-P	1:50 - 1:200
IF/ICC	1:50 - 1:200

Immunogen Information

Gene ID

4087

Swiss Prot

Q15796

Immunogen

Recombinant fusion protein containing a sequence corresponding to amino acids 175-270 of human Smad2 (NP_005892.1).

Synonyms

JV18; LDS6; CHTD8; MADH2; MADR2; JV18-1; hMAD-2; hSMAD2; Smad2

Contact

 | 400-999-6126 | cn.market@abclonal.com.cn | www.abclonal.com.cn

Product Information

Source

Rabbit

Isotype

IgG

Purification

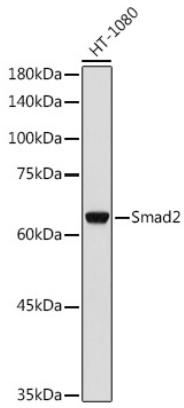
Affinity purification

Storage

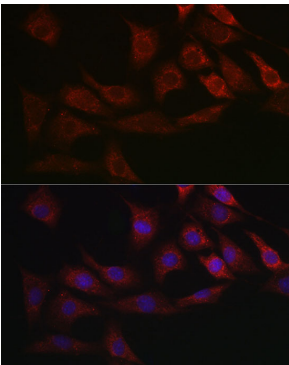
Store at -20°C. Avoid freeze / thaw cycles.

Buffer: PBS with 0.05% proclin300, 50% glycerol, pH7.3.

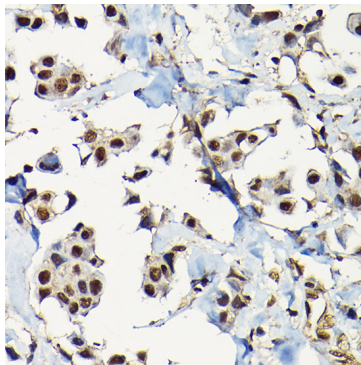
Validation Data



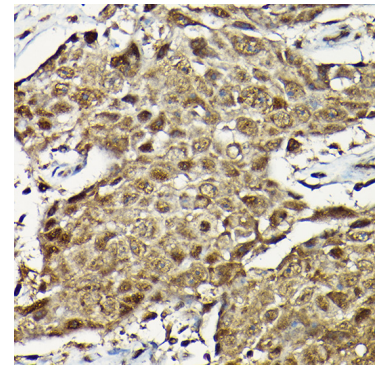
Western blot analysis of lysates from HT-1080 cells, using Smad2 Rabbit pAb (A16912) at 1:1000 dilution. Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution. Lysates/proteins: 25µg per lane. Blocking buffer: 3% nonfat dry milk in TBST. Detection: ECL Basic Kit (RM00020). Exposure time: 180s.



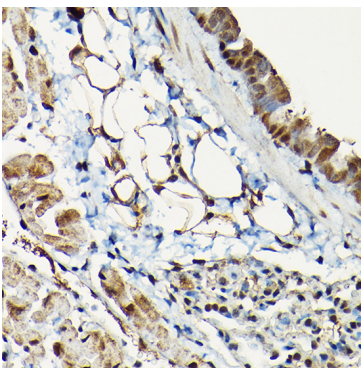
Immunofluorescence analysis of NIH/3T3 cells using Smad2 Rabbit pAb (A16912) at dilution of 1:100 (40x lens). Secondary antibody: Cy3 Goat Anti-Rabbit IgG (H+L) (AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.



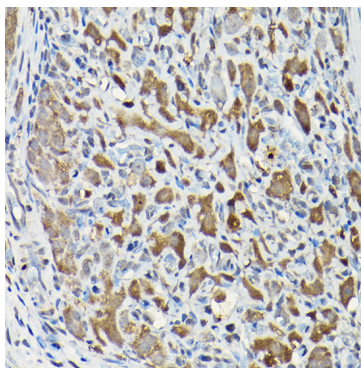
Immunohistochemistry analysis of paraffin-embedded human breast cancer using Smad2 Rabbit pAb (A16912) at dilution of 1:100 (40x lens). Perform high pressure antigen retrieval with 10 mM citrate buffer pH 6.0 before commencing with IHC staining protocol.



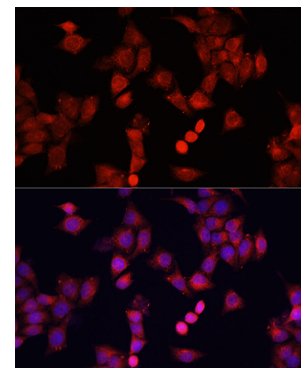
Immunohistochemistry analysis of paraffin-embedded human urothelial carcinoma using Smad2 Rabbit pAb (A16912) at dilution of 1:100 (40x lens). Perform high pressure antigen retrieval with 10 mM citrate buffer pH 6.0 before commencing with IHC staining protocol.



Immunohistochemistry analysis of paraffin-embedded mouse lung using Smad2 Rabbit pAb (A16912) at dilution of 1:100 (40x lens). Perform high pressure antigen retrieval with 10 mM citrate buffer pH 6.0 before commencing with IHC staining protocol.

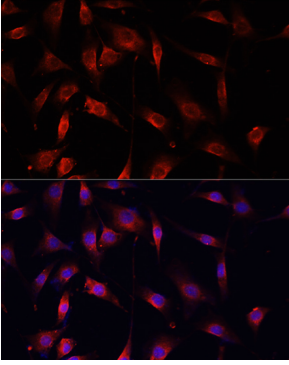


Immunohistochemistry analysis of paraffin-embedded rat ovary using Smad2 Rabbit pAb (A16912) at dilution of 1:100 (40x lens). Perform high pressure antigen retrieval with 10 mM citrate buffer pH 6.0 before commencing with IHC staining protocol.

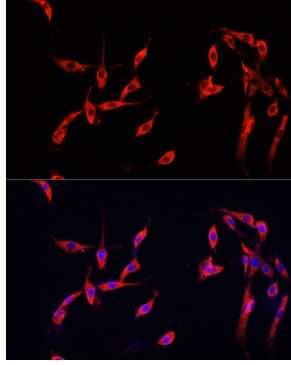


Immunofluorescence analysis of HeLa cells using Smad2 Rabbit pAb (A16912) at dilution of 1:100. Blue: DAPI for nuclear staining.

Validation Data



Immunofluorescence analysis of NIH/3T3 cells using Smad2 Rabbit pAb (A16912) at dilution of 1:100. Blue: DAPI for nuclear staining.



Immunofluorescence analysis of PC-12 cells using Smad2 Rabbit pAb (A16912) at dilution of 1:100. Blue: DAPI for nuclear staining.