

Phospho-Smad2-S465/467 + Smad3-S423/425 Rabbit pAb

Catalog No.: AP0548 **41 Publications**

Basic Information

Observed MW

60kDa

Calculated MW

48kDa/52kDa/25kDa/35kDa/43kDa

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. [provided by RefSeq, May 2012]

Recommended Dilutions

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

Immunogen Information

Gene ID

4087/4088

Swiss Prot

Q15796/P84022

Immunogen

A synthetic phosphorylated peptide around S465 & S467 of human Phospho-Smad2-S465/467 + Smad3-S423/425 (NP_005892.1).

Synonyms

HSPC193; HsT17436; JV15-2; LDS1C; LDS3; MADH3; Phospho-Smad2-S465/467 + Smad3-S423/425

Contact

 | www.abclonal.com

Product Information

Source

Rabbit

Isotype

IgG

Purification

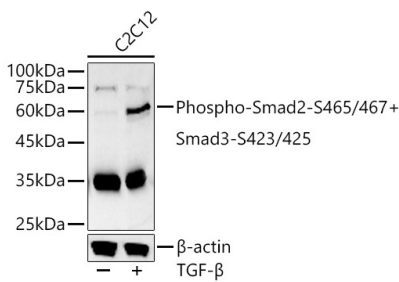
Affinity purification

Storage

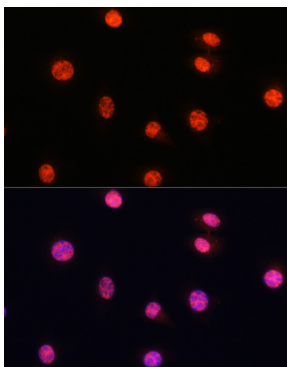
Store at -20°C. Avoid freeze / thaw cycles.

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

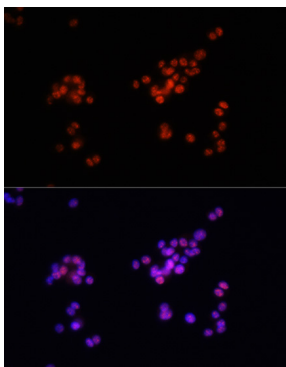
Validation Data



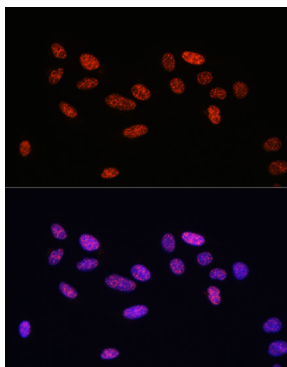
Western blot analysis of lysates from C2C12 cells, using Phospho-Smad2-S465/467 + Smad3-S423/425 Rabbit pAb (AP0548) at 1:800 dilution. C2C12 cells were treated by TGF- β (10 ng/ml) at 37°C for 30 minutes.
Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.
Lysates/proteins: 25 μ g per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
Detection: ECL Basic Kit (RM00020).
Exposure time: 30s.



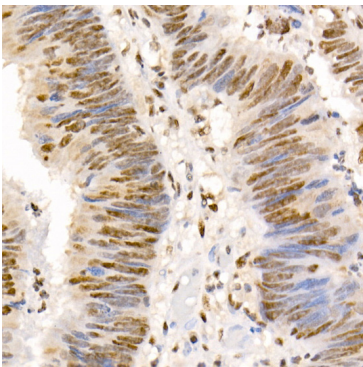
Immunofluorescence analysis of L929 cells using Phospho-Smad2-S465/467 + Smad3-S423/425 Rabbit pAb (AP0548) at dilution of 1:100. Blue: DAPI for nuclear staining.



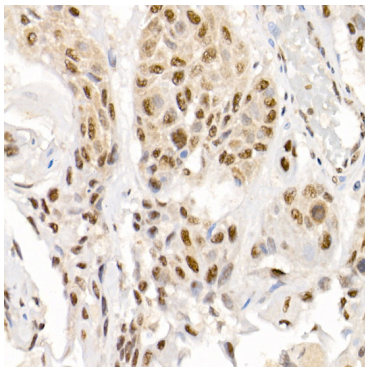
Immunofluorescence analysis of PC-12 cells using Phospho-Smad2-S465/467 + Smad3-S423/425 Rabbit pAb (AP0548) at dilution of 1:100. Blue: DAPI for nuclear staining.



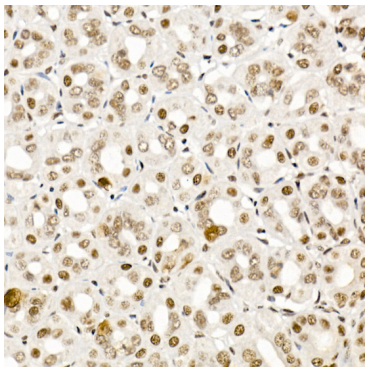
Immunofluorescence analysis of U2OS cells using Phospho-Smad2-S465/467 + Smad3-S423/425 Rabbit pAb (AP0548) at dilution of 1:100. Blue: DAPI for nuclear staining.



Immunohistochemistry analysis of Phospho-Smad2-S465/467 + Smad3-S423/425 in paraffin-embedded human colon carcinoma using Phospho-Smad2-S465/467 + Smad3-S423/425 Rabbit pAb (AP0548) at dilution of 1:50 (40x lens). Perform high pressure antigen retrieval with 10 mM citrate buffer pH 6.0 before commencing with IHC staining protocol.

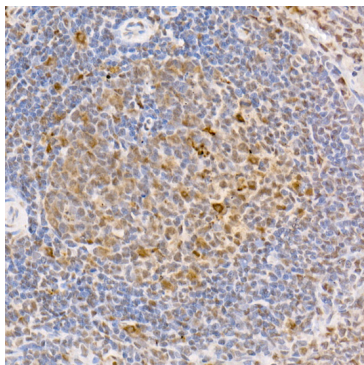


Immunohistochemistry analysis of Phospho-Smad2-S465/467 + Smad3-S423/425 in paraffin-embedded human esophageal cancer using Phospho-Smad2-S465/467 + Smad3-S423/425 Rabbit pAb (AP0548) at dilution of 1:50 (40x lens). Perform high pressure antigen retrieval with 10 mM citrate buffer pH 6.0 before commencing with IHC staining protocol.



Immunohistochemistry analysis of Phospho-Smad2-S465/467 + Smad3-S423/425 in paraffin-embedded mouse stomach using Phospho-Smad2-S465/467 + Smad3-S423/425 Rabbit pAb (AP0548) at dilution of 1:50 (40x lens). Perform high pressure antigen retrieval with 10 mM citrate buffer pH 6.0 before commencing with IHC staining protocol.

Validation Data



Immunohistochemistry analysis of Phospho-Smad2-S465/467 + Smad3-S423/425 in paraffin-embedded rat spleen using Phospho-Smad2-S465/467 + Smad3-S423/425 Rabbit pAb (AP0548) at dilution of 1:50 (40x lens). Perform high pressure antigen retrieval with 10 mM citrate buffer pH 6.0 before commencing with IHC staining protocol.