

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

Catalog No.: AP0548

58 Publications

## Basic Information

### Observed MW

60kDa

### Calculated MW

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

### Category

Primary antibody

### Applications

WB, IHC-P, IF/ICC, ELISA

### 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

**ELISA** Recommended starting concentration is 1 µg/mL. Please optimize the concentration based on your specific assay requirements.

## Immunogen Information

### Gene ID

4087/4088

### Swiss Prot

Q15796/P84022

### Immunogen

Synthetic peptide. This information is considered to be commercially sensitive.

### Synonyms

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

## Contact

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## Product Information

### Source

Rabbit

### Isotype

IgG

### Purification

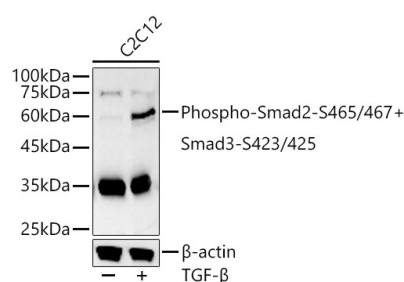
Affinity purification

### Storage

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

Buffer: PBS with 0.09% sodium azide, 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 with TGF- $\beta$  (10 ng/ml) at 37°C for 30 minutes.

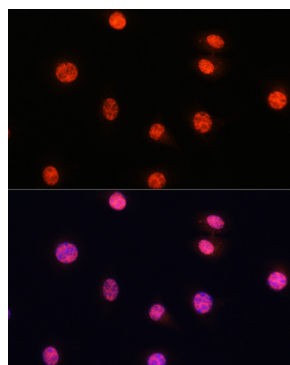
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.

Lysates/proteins: 25 $\mu$ g per lane.

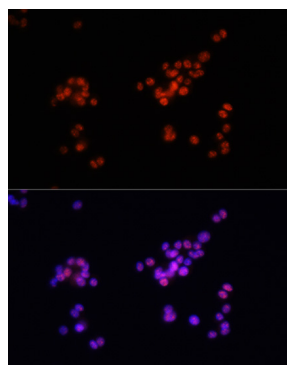
Blocking buffer: 3% nonfat dry milk in TBST.

Detection: ECL Basic Kit (RM00020).

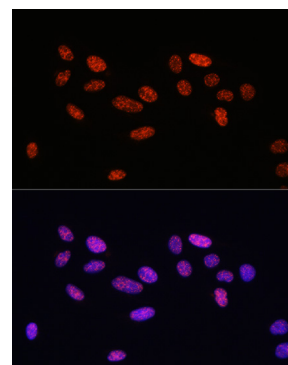
Exposure time: 30s.



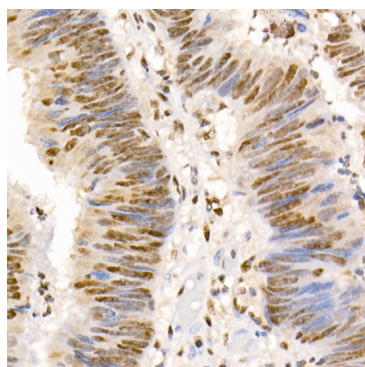
Immunofluorescence analysis of L929 cells using Phospho-Smad2-S465/467 + Smad3-S423/425 Rabbit pAb (AP0548) at dilution of 1:100. Blue: DAPI for nuclear staining.



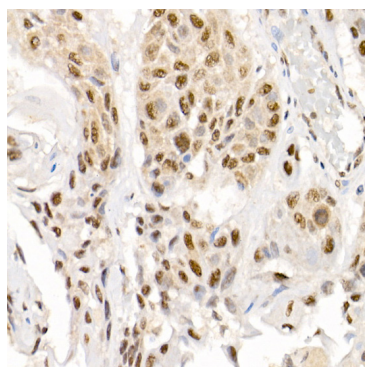
Immunofluorescence analysis of PC-12 cells using Phospho-Smad2-S465/467 + Smad3-S423/425 Rabbit pAb (AP0548) at dilution of 1:100. Blue: DAPI for nuclear staining.



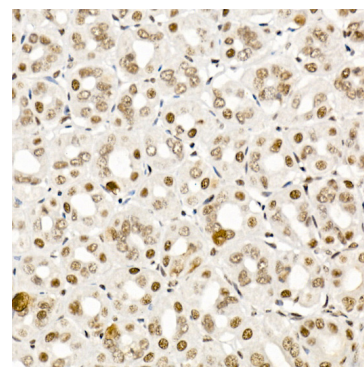
Immunofluorescence analysis of U2OS cells using Phospho-Smad2-S465/467 + Smad3-S423/425 Rabbit pAb (AP0548) at dilution of 1:100. Blue: DAPI for nuclear staining.



Immunohistochemistry analysis of paraffin-embedded Human colon carcinoma using Phospho-Smad2-S465/467 + Smad3-S423/425 Rabbit pAb (AP0548) at dilution of 1:50 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate buffer (pH 6.0) prior to IHC staining.



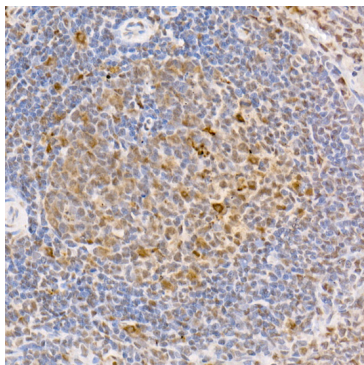
Immunohistochemistry analysis of paraffin-embedded Human esophageal cancer using Phospho-Smad2-S465/467 + Smad3-S423/425 Rabbit pAb (AP0548) at dilution of 1:50 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate buffer (pH 6.0) prior to IHC staining.



Immunohistochemistry analysis of paraffin-embedded Mouse stomach using Phospho-Smad2-S465/467 + Smad3-S423/425 Rabbit pAb (AP0548) at dilution of 1:50 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate buffer (pH 6.0) prior to IHC staining.

## Validation Data

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Immunohistochemistry analysis of paraffin-embedded Rat spleen using Phospho-Smad2-S465/467 + Smad3-S423/425 Rabbit pAb (AP0548) at dilution of 1:50 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate buffer (pH 6.0) prior to IHC staining.