

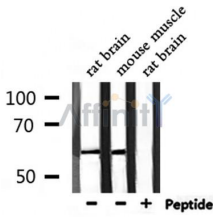
Phospho-Smad2 (Ser467) Ab

Cat.#: AF3449
Size: 100ul,200ul

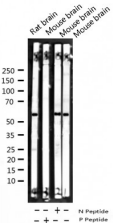
Concn.: 1mg/ml
Source: Rabbit

Mol.Wt.: 58kDa
Clonality: Polyclonal

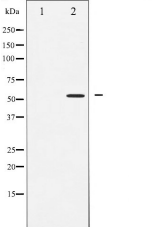
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|-------------------------------|--|
| Application: | WB 1:500-1:2000 IHC 1:50-1:200, IF/ICC 1:100-1:500 |
| Reactivity: | Human,Mouse,Rat |
| Purification: | The Ab is from purified rabbit serum by affinity purification via sequential chromatography on phospho- and non-phospho-peptide affinity columns. |
| Specificity: | Phospho-Smad2 (Ser467) Ab detects endogenous levels of Smad2 only when phosphorylated at Serine 467. |
| Immunogen: | A synthesized peptide derived from human Smad2 around the phosphorylation site of Serine 467. |
| Uniprot: | Q15796 |
| Description: | 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. |
| Subcellular Location: | Cytoplasm. Nucleus. Cytoplasmic and nuclear in the absence of TGF-beta. On TGF-beta stimulation, migrates to the nucleus when complexed with SMAD4. On dephosphorylation by phosphatase PPM1A, released from the SMAD2/SMAD4 complex, and exported out of the nucleus by interaction with RANBP1. |
| Tissue Specificity: | Expressed at high levels in skeletal muscle, endothelial cells, heart and placenta. |
| Similarity: | Belongs to the dwarfin/SMAD family. |
| Storage Condition and Buffer: | Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.Store at -20 °C.Stable for 12 months from date of receipt. |



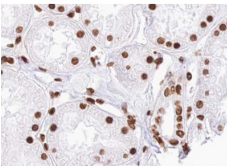
Western blot analysis of extracts from rat brain, mouse muscle, using Phospho-Smad2 (Ser467) Ab.



Western blot analysis of Phospho-Smad2 (Ser467) expression in various lysates



Western blot analysis of Smad2 phosphorylation expression in PMA treated HepG2 whole cell lysates, The lane on the left is treated with the antigen-specific peptide.



AF3449 at 1/100 staining human kidney carcinoma tissue sections by IHC-P. The tissue was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The tissue was then blocked and incubated with the Ab for 1.5 hours at 22°C. An HRP conjugated goat anti-rabbit Ab was used as the secondary.



AF3449 staining HepG2 by IF/ICC. The sample were fixed with PFA and permeabilized in 0.1% Triton X-100, then blocked in 10% serum for 45 minutes at 25°C. The primary Ab was diluted at 1/200 and incubated with the sample for 1 hour at 37°C. An Alexa Fluor 594 conjugated goat anti-rabbit IgG (H+L) Ab, diluted at 1/600, was used as the secondary Ab.

IMPORTANT: For western blot, incubate membrane with diluted primary Ab in 5% w/v milk, 1X TBS, 0.1% Tween@20 at 4°C with gentle shaking, overnight.

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