

Rabbit Anti-Smad7 + Smad6 Polyclonal Antibody Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP52036

### **Specification**

## Rabbit Anti-Smad7 + Smad6 Polyclonal Antibody - Product Information

Application Primary Accession Reactivity Host Clonality WB, IHC-P, IHC-F, IF, ICC, E <u>015105</u> Human, Mouse, Rat Rabbit Polyclonal

### Rabbit Anti-Smad7 + Smad6 Polyclonal Antibody - Additional Information

Gene ID 4092

**Other Names** 

CRCS3; MADH7; MADH8; Mothers against decapentaplegic homolog 7; MAD homolog 7; Mothers against DPP homolog 7; Mothers against decapentaplegic homolog 8; MAD homolog 8; Mothers against DPP homolog 8; SMAD family member 7; SMAD 7; Smad7; hSMAD7

Dilution <span class ="dilution\_WB">WB~~1:100-1:500</span><br \><span class ="dilution\_IHC-P">IHC-P~~1:100~1:500</span><br \><span class ="dilution\_IHC-F">IHC-P~~1:100~1:500</span><br \><span class ="dilution\_IHC-F">IHC-P~~1:100~1:500</span><br \><span class ="dilution\_IHC-F">IHC-P~~1:50~200</span><br \><span class ="dilution\_IF">IF~~1:50~200</span><br \><span class ="dilution\_ICC">ICC~~N/A</span><br \><span class ="dilution\_E">E~~N/A</span>

Format 0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

**Storage** Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

## Rabbit Anti-Smad7 + Smad6 Polyclonal Antibody - Protein Information

Name SMAD7

Synonyms MADH7, MADH8

#### Function

Antagonist of signaling by TGF-beta (transforming growth factor) type 1 receptor superfamily members; has been shown to inhibit TGF-beta (Transforming growth factor) and activin signaling by associating with their receptors thus preventing SMAD2 access (PubMed:<a href="http://www.uniprot.org/citations/21791611" target="\_blank">21791611</a>). Functions as an adapter to recruit SMURF2 to the TGF-beta receptor complex. Also acts by recruiting the PPP1R15A-PP1 complex to TGFBR1, which promotes its dephosphorylation. Positively regulates



PDPK1 kinase activity by stimulating its dissociation from the 14-3-3 protein YWHAQ which acts as a negative regulator.

# **Cellular Location**

Nucleus. Cytoplasm. Note=Interaction with NEDD4L or RNF111 induces translocation from the nucleus to the cytoplasm (PubMed:16601693). TGF-beta stimulates its translocation from the nucleus to the cytoplasm. PDPK1 inhibits its translocation from the nucleus to the cytoplasm in response to TGF-beta (PubMed:17327236)

#### **Tissue Location**

Ubiquitous with higher expression in the lung and vascular endothelium

## Rabbit Anti-Smad7 + Smad6 Polyclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

## Rabbit Anti-Smad7 + Smad6 Polyclonal Antibody - Images



Mouse placenta lysate probed with Anti-Smad7 + Smad6 Polyclonal Antibody (AP52036) at 1:300 overnight in  $4^{\circ}$ C. Followed by conjugation to the secondary antibody at 1:5000 90min in  $37^{\circ}$ C.





Mouse lung lysate probed with Anti-Smad7 + Smad6 Polyclonal Antibody (AP52036 at 1:300 overnight in 4°C. Followed by conjugation to the secondary antibody antibody at 1:5000 90min in  $37^{\circ}$ C.



Formalin-fixed and paraffin embedded rat kidney tissue labeled with Anti-Smad7/Smad6 Polyclonal Antibody (AP52036), Unconjugated at 1:200, followed by conjugation to the secondary antibody and DAB staining

# Rabbit Anti-Smad7 + Smad6 Polyclonal Antibody - Background

Antagonist of signaling by TGF-beta (transforming growth factor) type 1 receptor superfamily members; has been shown to inhibit TGF-beta (Transforming growth factor) and activin signaling by associating with their receptors thus preventing SMAD2 access. Functions as an adapter to recruit SMURF2 to the TGF-beta receptor complex. Also acts by recruiting the PPP1R15A-PP1 complex to TGFBR1, which promotes its dephosphorylation. Positively regulates PDPK1 kinase activity by stimulating its dissociation from the 14-3-3 protein YWHAQ which acts as a negative regulator (By similarity).

Rabbit Anti-Smad7 + Smad6 Polyclonal Antibody - Citations

- <u>β-Cyclodextrin/dialdehyde glucan-coated keratin nanoparticles for oral delivery of insulin</u>
- Bone marrow mesenchymal stem cell-derived exosomal miR-34c-5p ameliorates RIF by inhibiting the core fucosylation of multiple proteins