

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
O15105
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

WB~~1:100-1:500<br \> IHC-P~~1:100~1:500

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: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

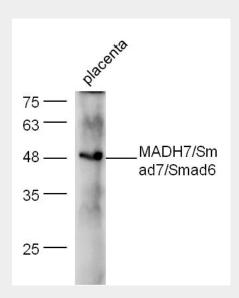
Ubiquitous with higher expression in the lung and vascular endothelium

Rabbit Anti-Smad7 + Smad6 Polyclonal Antibody - Protocols

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

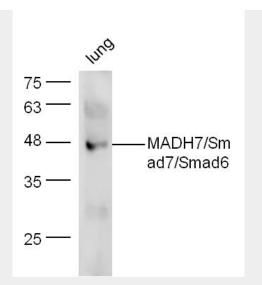
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Rabbit Anti-Smad7 + Smad6 Polyclonal Antibody - Images

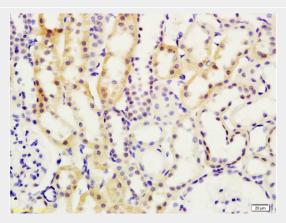


Mouse placenta lysate probed with Anti-Smad7 + Smad6 Polyclonal Antibody (AP52036) at 1:300 overnight in 4°C. Followed by conjugation to the secondary antibody at 1:5000 90min in 37°C.





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° 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).