

**Anti-SMAD6 Antibody**  
Rabbit polyclonal antibody to SMAD6  
Catalog # AP59616

**Specification**

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**Anti-SMAD6 Antibody - Product Information**

Application	WB
Primary Accession	<a href="#">O43541</a>
Other Accession	<a href="#">O35182</a>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	53497

**Anti-SMAD6 Antibody - Additional Information**

Gene ID 4091

**Other Names**

MADH6; Mothers against decapentaplegic homolog 6; MAD homolog 6; Mothers against DPP homolog 6; SMAD family member 6; SMAD 6; Smad6; hSMAD6

**Target/Specificity**

Recognizes endogenous levels of SMAD6 protein.

**Dilution**

WB~~WB (1/500 - 1/1000), IH (1/100 - 1/200)

**Format**

Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.

**Storage**

Store at -20 °C. Stable for 12 months from date of receipt

**Anti-SMAD6 Antibody - Protein Information**

Name SMAD6

Synonyms MADH6

**Function**

Transforming growth factor-beta superfamily receptors signaling occurs through the Smad family of intracellular mediators. SMAD6 is an inhibitory Smad (i-Smad) that negatively regulates signaling downstream of type I transforming growth factor-beta (PubMed: <a href="http://www.uniprot.org/citations/10647776" target="\_blank">10647776</a>, PubMed: <a href="http://www.uniprot.org/citations/10708948" target="\_blank">10708948</a>, PubMed: <a href="http://www.uniprot.org/citations/10708949" target="\_blank">10708949</a>, PubMed: <a href="http://www.uniprot.org/citations/10708949" target="\_blank">10708949</a>, PubMed: <a href="http://www.uniprot.org/citations/10708949" target="\_blank">10708949</a>)

<http://www.uniprot.org/citations/16951688> target="\_blank">16951688</a>, PubMed:<a href="http://www.uniprot.org/citations/22275001" target="\_blank">22275001</a>, PubMed:<a href="http://www.uniprot.org/citations/30848080" target="\_blank">30848080</a>, PubMed:<a href="http://www.uniprot.org/citations/9436979" target="\_blank">9436979</a>, PubMed:<a href="http://www.uniprot.org/citations/9759503" target="\_blank">9759503</a>). Acts as a mediator of TGF-beta and BMP anti-inflammatory activities. Suppresses IL1R-TLR signaling through its direct interaction with PEL1, preventing NF-kappa-B activation, nuclear transport and NF-kappa-B- mediated expression of pro-inflammatory genes (PubMed:<a href="http://www.uniprot.org/citations/16951688" target="\_blank">16951688</a>). Blocks the BMP-SMAD1 signaling pathway by competing with SMAD4 for receptor- activated SMAD1-binding (PubMed:<a href="http://www.uniprot.org/citations/30848080" target="\_blank">30848080</a>, PubMed:<a href="http://www.uniprot.org/citations/9436979" target="\_blank">9436979</a>). Binds to regulatory elements in target promoter regions (PubMed:<a href="http://www.uniprot.org/citations/16491121" target="\_blank">16491121</a>).

### Cellular Location

Nucleus.

### Tissue Location

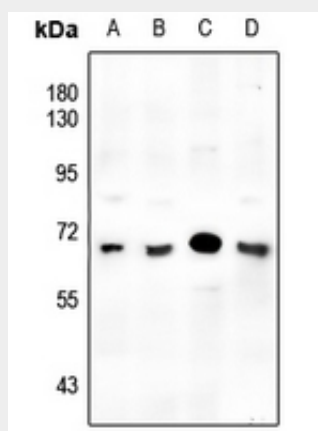
[Isoform B]: Expressed in the brain, heart, ovary, peripheral blood leukocytes, small intestine, spleen, thymus, bone marrow, fetal liver and lymph nodes.

### Anti-SMAD6 Antibody - Protocols

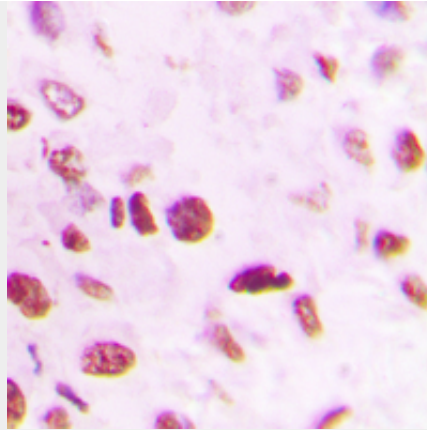
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### Anti-SMAD6 Antibody - Images



Western blot analysis of SMAD6 expression in A549 (A), PC3 (B), CT26 (C), H9C2 (D) whole cell lysates.



Immunohistochemical analysis of SMAD6 staining in human lung cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

#### **Anti-SMAD6 Antibody - Background**

KLH-conjugated synthetic peptide encompassing a sequence within the center region of human SMAD6. The exact sequence is proprietary.