

**SMAD6 Antibody (Center)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AW5282**

**Specification**

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**SMAD6 Antibody (Center) - Product Information**

Application	WB, FC,E
Primary Accession	<a href="#">O43541</a>
Other Accession	<a href="#">O35182</a> , <a href="#">NP_005576.3</a>
Reactivity	Human
Predicted	Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	H=53,26,35;M=54 KDa
Isotype	Rabbit IgG
Antigen Source	HUMAN

**SMAD6 Antibody (Center) - Additional Information**

**Gene ID** 4091

**Antigen Region**  
358-386

**Other Names**  
SMAD6; MADH6; Mothers against decapentaplegic homolog 6; SMAD family member 6

**Dilution**  
WB~~1:1000  
FC~~1:10~50

**Target/Specificity**  
This SMAD6 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 358-386 amino acids from the Central region of human SMAD6.

**Format**  
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

**Storage**  
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**  
SMAD6 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

**SMAD6 Antibody (Center) - 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/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

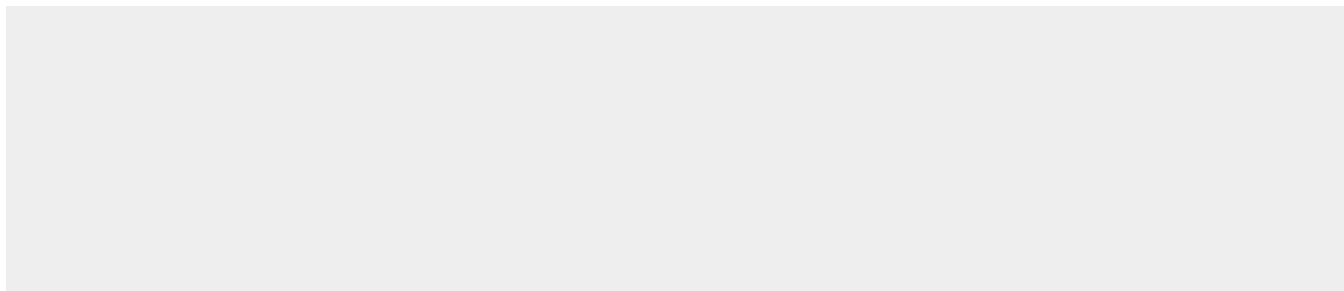
[Isoform B]: Expressed in the brain, heart, ovary, peripheral blood leukocytes, small intestine, spleen, thymus, bone marrow, fetal liver and lymph nodes.

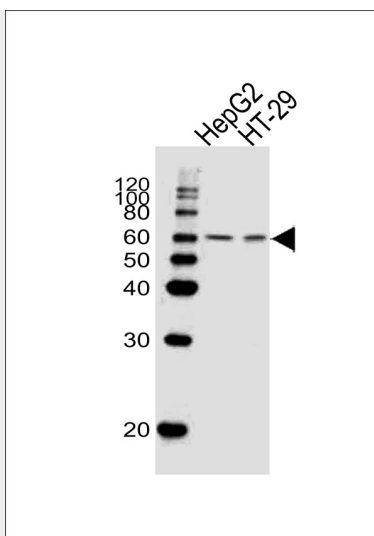
### SMAD6 Antibody (Center) - Protocols

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

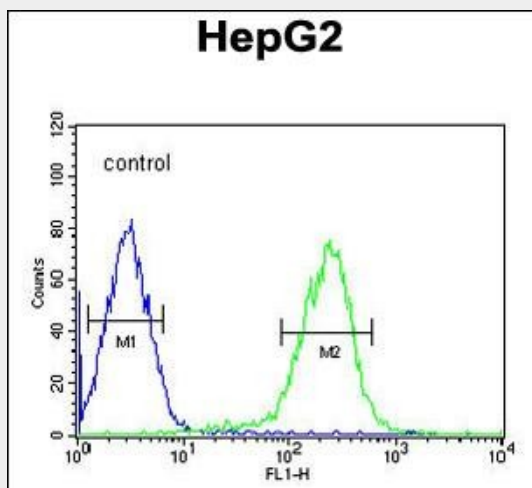
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### SMAD6 Antibody (Center) - Images





Western blot analysis of lysates from HepG2, HT-29 cell line (from left to right), using SMAD6 Antibody (Center) (Cat. #AW5282). AW5282 was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L (HRP) at 1:10000 dilution was used as the secondary antibody.



SMAD6 Antibody (Center) (Cat. #AW5282) flow cytometric analysis of HepG2 cells (right histogram) compared to a negative control cell (left histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

#### SMAD6 Antibody (Center) - Background

SMAD6 belongs to the SMAD family of proteins, which are related to Drosophila *mothers against decapentaplegic* (Mad) and C. elegans Sma. SMAD proteins are signal transducers and transcriptional modulators that mediate multiple signaling pathways. This protein functions in the negative regulation of BMP and TGF-beta/activin-signalling.

#### SMAD6 Antibody (Center) - References

- Tseng, Z.H., et al. Heart Rhythm 6(12):1745-1750(2009)
- Shintani, M., et al. J. Med. Genet. 46(5):331-337(2009)
- Yu, H., et al. Acta Derm. Venereol. 89(4):351-356(2009)