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SMAD6 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AW5282

Specification

SMAD6 Antibody (Center) - Product Information

Application	**WB, FC,E**
Primary Accession	O43541
Other Accession	O35182, NP_005576.3
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:9436979, PubMed:16951688, PubMed:22275001, PubMed:9759503, PubMed:10647776, PubMed:10708948, PubMed:10708949, PubMed:30848080). 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:16951688). Blocks the BMP-SMAD1 signaling pathway by competing with SMAD4 for receptor- activated SMAD1-binding (PubMed:9436979, PubMed:30848080). Binds to regulatory elements in target promoter regions (PubMed:16491121).

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.

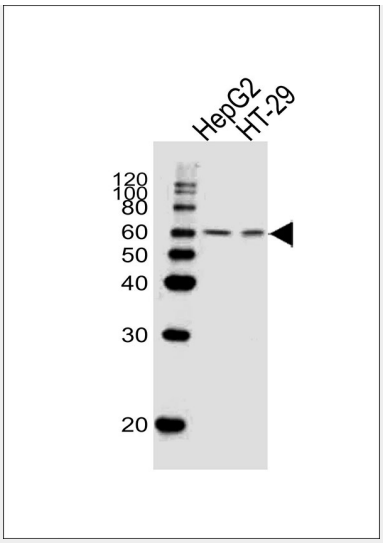
SMAD6 Antibody (Center) - Protocols

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

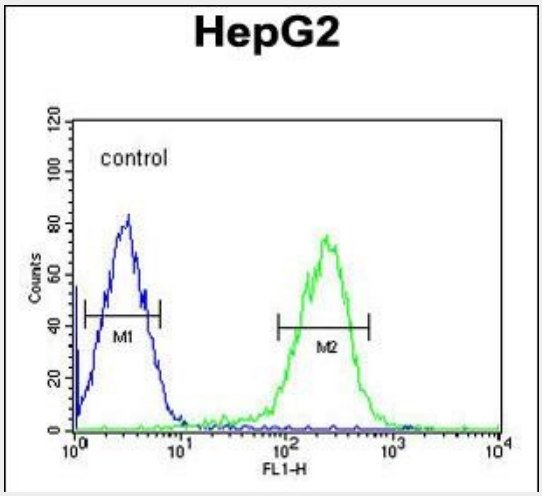
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

SMAD6 Antibody (Center) - Images

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Western blot analysis of lysates from HepG2,HT-29 cell line (from left to right), using SMAD6Antibody(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)