

SMAD6 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP5344c

Specification

SMAD6 Antibody (Center) - Product Information

Application WB,E
Primary Accession O43541

Other Accession <u>035182</u>, <u>NP 005576.3</u>

Reactivity
Predicted
Host
Clonality
Isotype
Antigen Region

Human
Mouse
Rabbit
Polyclonal
Rabbit IgG
358-386

SMAD6 Antibody (Center) - Additional Information

Gene ID 4091

Other Names

Mothers against decapentaplegic homolog 6, MAD homolog 6, Mothers against DPP homolog 6, SMAD family member 6, SMAD 6, Smad6, hSMAD6, SMAD6, MADH6

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.

Dilution

WB~~1:500

E~~Use at an assay dependent concentration.

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:10647776, PubMed:10708948, PubMed:10708949, PubMed:16951688, PubMed:22275001, PubMed:30848080, PubMed:9436979, PubMed:9759503). 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:30848080, PubMed:9436979). Binds to regulatory elements in target promoter regions (PubMed:16491121).

Cellular Location

Nucleus.

Tissue Location

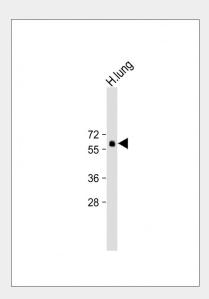
[Isoform B]: Expressed in the brain, heart, ovary, peripheral blood leukocytes, small intestine, spleen, thymus, bone marrow, fetal liver and lymph nodes.

SMAD6 Antibody (Center) - Protocols

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

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

SMAD6 Antibody (Center) - Images



Anti-SMAD6 Antibody (Center) at 1:500 dilution + H. lung whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution.



Predicted band size: 53 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

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)