

Anti-SMAD6 Antibody

Rabbit polyclonal antibody to SMAD6 Catalog # AP59616

Product Information

Application WB, IHC
Primary Accession O43541
Other Accession O35182

Reactivity Human, Mouse, Rat

HostRabbitClonalityPolyclonalCalculated MW53497

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

(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

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:<u>30848080</u>, PubMed:<u>9436979</u>, PubMed:<u>9759503</u>). 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:<u>16951688</u>). 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.

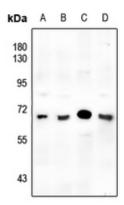
Tissue Location

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

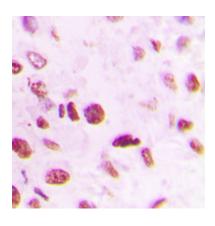
Background

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

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.

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