

# SMAD6 antibody - N-terminal region

Rabbit Polyclonal Antibody

Catalog # AI16233

## Product Information

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<b>Application</b>	WB
<b>Primary Accession</b>	<a href="#">O43541</a>
<b>Other Accession</b>	<a href="#">NM_005585</a> , <a href="#">NP_005576</a>
<b>Reactivity</b>	Human, Pig, Dog, Bovine
<b>Predicted</b>	Human, Pig, Dog, Bovine
<b>Host</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>Calculated MW</b>	53497

## Additional Information

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<b>Gene ID</b>	4091
<b>Alias Symbol</b>	HsT17432, MADH6, MADH7
<b>Other Names</b>	Mothers against decapentaplegic homolog 6, MAD homolog 6, Mothers against DPP homolog 6, SMAD family member 6, SMAD 6, Smad6, hSMAD6, SMAD6, MADH6
<b>Format</b>	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.
<b>Reconstitution &amp; Storage</b>	Add 50 ul of distilled water. Final anti-SMAD6 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.
<b>Precautions</b>	SMAD6 antibody - N-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

## Protein Information

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<b>Name</b>	SMAD6
<b>Synonyms</b>	MADH6
<b>Function</b>	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="#">10647776</a> , PubMed: <a href="#">10708948</a> , PubMed: <a href="#">10708949</a> , PubMed: <a href="#">16951688</a> , PubMed: <a href="#">22275001</a> , PubMed: <a href="#">30848080</a> , PubMed: <a href="#">9436979</a> , PubMed: <a href="#">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:[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.

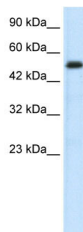
## Background

Acts as a mediator of TGF-beta and BMP antiinflammatory activity. Suppresses IL1R-TLR signaling through its direct interaction with PEL1, preventing NF-kappa-B activation, nuclear transport and NF-kappa-B-mediated expression of proinflammatory genes. May block the BMP-SMAD1 signaling pathway by competing with SMAD4 for receptor-activated SMAD1-binding. Binds to regulatory elements in target promoter regions.

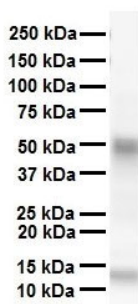
## References

Riggins G.J.,et al.Nat. Genet. 13:347-349(1996).  
Hata A.,et al.Genes Dev. 12:186-197(1998).  
Afrakhte M.,et al.Biochem. Biophys. Res. Commun. 249:505-511(1998).  
Hagiwara K.,et al.Submitted (JAN-1998) to the EMBL/GenBank/DDBJ databases.  
Konrad L.,et al.Submitted (NOV-2007) to the EMBL/GenBank/DDBJ databases.

## Images



WB Suggested Anti-SMAD6 Antibody Titration: 0.2-1 µg/ml  
Positive Control: Jurkat cell lysate  
There is BioGPS gene expression data showing that SMAD6 is expressed in Jurkat



WB Suggested Anti-SMAD6 antibody Titration: 1 µg/ml  
Sample Type: Human heart

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.