

Rabbit anti-Human, Mouse Smad 6 Polyclonal Antibody | anti-SMAD6 antibody

Smad 6 Antibody

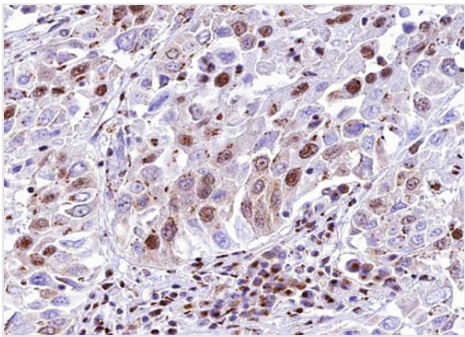
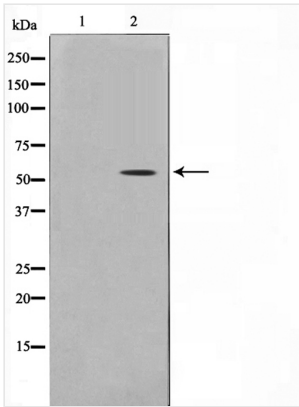
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA321835	Rabbit	Human, Mouse	ELISA, Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

Smad 6; Polyclonal Antibody; Smad 6 Antibody; hSMAD6; MAD homolog 6; MADH6; MADH7; Mothers against decapentaplegic homolog 6; Mothers against DPP homolog 6; SMAD 6; SMAD family member 6; SMAD mothers against DPP homolog 6; Smad6; SMAD6_HUMAN; anti-SMAD6 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse
Clonality	Polyclonal
Isotype	IgG
Specificity	Smad 6 antibody detects endogenous levels of total Smad 6
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	496
Applicable Applications for anti-SMAD6 antibody	ELISA, IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthesized peptide derived from human Smad 6
Subcellular Location	Nucleus.
Tissue Specificity	Ubiquitous in various organs, with higher levels in lung. Isoform B is up-regulated in diseased heart tissue.
Predicted Cross Reactivity	Pig, Bovine, Horse, Sheep, Dog, Chicken
Similarity	Pig (100%), Bovine (100%), Horse (93%), Sheep (100%), Dog (93%), Chicken (86%)
Conjugation	Unconjugated
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.



IHC (Immunohistochemistry)
AAA321835 at 1/100 staining human lung tissue sections by IHC-P. The tissue was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The tissue was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.

WB (Western Blot)
Western blot analysis of Smad 6 expression in mouse brain. The lane on the left is treated with the antigen-specific peptide.

ADDITIONAL INFORMATION

Related Product Information for anti-SMAD6 antibody

Description: 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.

Subunit Structure: Interacts with NEDD4L (By similarity). Interacts with WWP1 (By similarity). Interacts with STAMBP and PRKX. Interacts with RNF111 and AXIN1. Interacts with TGF-beta type I receptor superfamily members, including ACVR1B, BMPR1B and TGFBR1. In response to BMP2, but not to TGF-beta treatment, interacts with SMAD1, but not with SMAD2, nor with SMAD4; this interaction may inhibit SMAD1 binding to SMAD4. Interacts with HOXC8 and HOXC9. Interacts with PELI1; this interaction interferes with PELI1 complex formation with TRAF6, IRAK1, IRAK4 and MYD88 in response to IL1B and hence negatively regulates IL1R-TLR signaling.

Post-translational Modifications: Phosphorylated by BMP type 1 receptor kinase and by PRKX. Monoubiquitinated at Lys-173 by the E2/E3 hybrid ubiquitin-protein ligase UBE2O, leading to reduced binding affinity for the activated BMP type I receptor ACVR1/ALK2, thereby enhancing BMP7 and regulating adipocyte differentiation (PubMed:23455153). Ubiquitinated by WWP1 (By similarity). Ubiquitinated by RNF165, promoting proteasomal degradation, leading to enhance the BMP-Smad signaling (By similarity). Arginine methylation by PRMT1, which is recruited by BMPR2, initiates BMP-Induced signaling and induces dissociation from the BMPR1B receptor at the cell surface leading to derepress downstream Smad1/Smad5 signaling.

Similarity: Belongs to the dwarfin/SMAD family.

NCBI AND UNIPROT INFORMATION

NCBI GI #	92859871
NCBI GeneID	4091
NCBI Accession #	NP_005576.3
NCBI GenBank Nucleotide #	NM_005585.4
UniProt Accession #	O43541; O43654; Q15799; Q7Z7L4; Q96E31; Q9UKZ3; A9J6M5
Molecular Weight	Observed: 53 kDa Predicted: 54 kDa
NCBI Official Full Name	mothers against decapentaplegic homolog 6
NCBI Official Synonym Full Names	SMAD family member 6
NCBI Official Symbol	SMAD6
NCBI Official Synonym Symbols	AOVD2; MADH6; MADH7; HsT17432
NCBI Protein Information	mothers against decapentaplegic homolog 6

UniProt Protein Name	Mothers against decapentaplegic homolog 6
UniProt Gene Name	SMAD6
UniProt Synonym Gene Names	MADH6; MAD homolog 6; Mothers against DPP homolog 6; SMAD 6; Smad6; hSMAD6

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/smad-6-antibody-immunohistochemistry-western-blot-elisa/321835>