

Rabbit SMAD2 Polyclonal Antibody | anti-SMAD2 antibody

SMAD2 Antibody (T220)

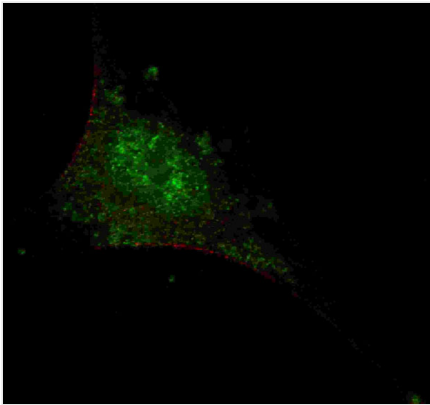
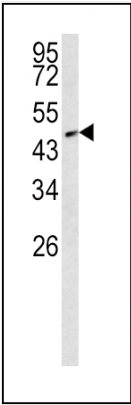
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA285936	Rabbit	Human (Predicted Reactivity: Bovine, Zebrafish, Mouse, Rat)	Western Blot, ELISA, Immunofluorescence

PRODUCT SYNONYMS

SMAD2; Polyclonal Antibody; SMAD2 Antibody (T220); Mothers against decapentaplegic homolog 2; MAD homolog 2; Mothers against DPP homolog 2; JV18-1; Mad-related protein 2; hMAD-2; SMAD family member 2; SMAD 2; Smad2; hSMAD2; MADH2; MADR2; anti-SMAD2 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human (Predicted Reactivity: Bovine, Zebrafish, Mouse, Rat)
Clonality	Polyclonal
Isotype	Rabbit Ig
Specificity	This SMAD2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 201-230 amino acids from human SMAD2.
Purity/Purification	Peptide Affinity Purified Rabbit Polyclonal Antibody (Pab)
Form/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.
Concentration	Vial Concentration: 0.45 (varies by lot)
Sequence Positions	201-230
Sequence Length	467
Applicable Applications for anti-SMAD2 antibody	WB (Western Blot), ELISA, IF (Immunofluorescence)
Antigen Type	Synthetic Peptide
Antigen Source	HUMAN
Preparation and Storage	Maintain refrigerated at 2-8 degree C for up to 6 months. For long term storage store at -20 degree C in small aliquots to prevent freeze-thaw cycles.



WB (Western Blot)

Western blot analysis of SMAD2 Antibody (T220) in NCI-H460 cell line lysates (35ug/lane). SMAD2 (arrow) was detected using the purified Pab.

IF (Immunofluorescence)

Fluorescent confocal image of SY5Y cells stained with SMAD2 (T220) antibody. SY5Y cells were fixed with 4% PFA (20 min), permeabilized with Triton X-100 (0.2%, 30 min). Cells were then incubated with AAA285936 SMAD2 (T220) primary antibody (1:200, 2 h at room temperature). For secondary antibody, Alexa Fluor 488 conjugated donkey anti-rabbit antibody (green) was used (1:1000, 1h). Nuclei were counterstained with Hoechst 33342 (blue) (10 ug/ml, 5 min). Note the highly specific localization of the SMAD2 mainly to the nucleus.

ADDITIONAL INFORMATION

Related Product Information for anti-SMAD2 antibody	The protein belongs to the SMAD, a family of proteins similar to the proteins of the Drosophila gene 'mothers against decapentaplegic' (Mad) and the C. elegans gene Sma. SMAD proteins are signal transducers and transcriptional modulators that mediate multiple signaling pathways. This protein mediates the signal of the transforming growth factor (TGF)-beta, and thus regulates multiple cellular processes, such as cell proliferation, apoptosis, and differentiation. This protein is recruited to the TGF-beta receptors through its interaction with the SMAD anchor for receptor activation (SARA) protein. In response to TGF-beta signal, this protein is phosphorylated by the TGF-beta receptors. The phosphorylation induces the dissociation of this protein with SARA and the association with the family member SMAD4. The association with SMAD4 is important for the translocation of this protein into the nucleus, where it binds to target promoters and forms a transcription repressor complex with other cofactors. This protein can also be phosphorylated by activin type 1 receptor kinase, and mediates the signal from the activin.
Product Categories/Family for anti-SMAD2 antibody	Cancer; Developmental biology; Signal transduction
References	References for protein: 1.Funaba,M., J. Biol. Chem. 277 (44), 41361-41368 (2002) 2.Wicks,S.J., Mol. Cell. Biol. 20 (21), 8103-8111 (2000) References for SY5Y (SH-SY5Y; #CRL-2266): 1. Ross RA, et al. Coordinate morphological and biochemical interconversion of human neuroblastoma cells. J. Natl. Cancer Inst. 71: 741-749, 1983. [PubMed: 6137586]; 2. Biedler JL, et al. Multiple neurotransmitter synthesis by human neuroblastoma cell lines and clones. Cancer Res. 38: 3751-3757, 1978. [PubMed: 29704].

NCBI AND UNIPROT INFORMATION

NCBI GI #	51173730
NCBI GeneID	4087
NCBI Accession #	NP_001003652.1; NP_005892.1
NCBI GenBank Nucleotide #	NM_001003652.3
UniProt Accession #	Q15796
Molecular Weight	52306
NCBI Official Full Name	mothers against decapentaplegic homolog 2 isoform 1

NCBI Official Synonym Full Names	SMAD family member 2
NCBI Official Symbol	SMAD2
NCBI Official Synonym Symbols	JV18; MADH2; MADR2; JV18-1; hMAD-2; hSMAD2
NCBI Protein Information	mothers against decapentaplegic homolog 2
UniProt Protein Name	Mothers against decapentaplegic homolog 2
UniProt Gene Name	SMAD2
UniProt Synonym Gene Names	MADH2; MADR2; MAD homolog 2; Mothers against DPP homolog 2; hMAD-2; SMAD 2; Smad2; hSMAD2
UniProt Entry Name	SMAD2_HUMAN

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/smad2-antibody-western-blot-immunofluorescence-elisa/285936>