

Rabbit Smad2 Monoclonal Antibody | anti-Smad2 antibody

Anti-Smad2 Rabbit Monoclonal Antibody

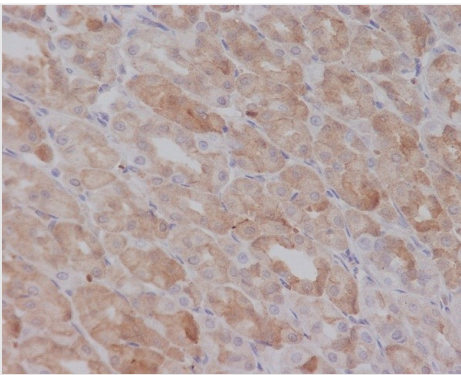
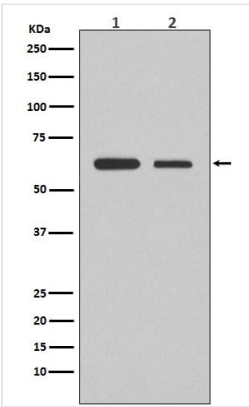
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA46869	Rabbit	Human, Mouse, Rat	Western Blot, Immunocytochemistry, Immunofluorescence, Flow Cytometry, Functional Assay

PRODUCT SYNONYMS

Smad2; Monoclonal Antibody; Anti-Smad2 Rabbit Monoclonal Antibody; 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; hSMAD2; SMAD2; MADH2; MADR2; anti-Smad2 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Monoclonal
Purity/Purification	Affinity-chromatography
Form/Format	Liquid
Sequence Length	437
Applicable Applications for anti-Smad2 antibody	WB (Western Blot), ICC (Immunocytochemistry), IF (Immunofluorescence), FCM/FACS (Flow Cytometry)
Immunogen	A synthesized peptide derived from human Smad2
Subcellular Localization	Cytoplasm. Nucleus. Cytoplasmic and nuclear in the absence of TGF-beta. On TGF-beta stimulation, migrates to the nucleus when complexed with SMAD4. On dephosphorylation by phosphatase PPM1A, released from the SMAD2/SMAD4 complex, and exported out of the nucleus by interaction with RANBP1.
Tissue Specificity	Expressed at high levels in skeletal muscle, endothelial cells, heart and placenta.
Contents	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Preparation and Storage	Store at -20 degree C for one year. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for a longer time. Avoid repeated freezing and thawing.



IHC (Immunohistochemistry)
Immunohistochemical analysis of paraffin-embedded rat stomach, using Smad2 Antibody(AAA46869)SMAD2 was detected in paraffin-embedded tissue section. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-SMAD2 Antibody (AAA46869)overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.

WB (Western Blot)
Western blot analysis of Smad2 expression in (1) Jurkat cell lysate;(2) RAW2647 cell lysate (AAA46869).Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions.After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-SMAD2 monoclonal antibody overnight at 4 degree C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for SMAD2

ADDITIONAL INFORMATION

Related Product Information for anti-Smad2 antibody	Receptor-regulated SMAD (R-SMAD) that is an intracellular signal transducer and transcriptional modulator activated by TGF-beta (transforming growth factor) and activin type 1 receptor kinases. Binds the TRE element in the promoter region of many genes that are regulated by TGF-beta and, on formation of the SMAD2/SMAD4 complex, activates transcription. May act as a tumor suppressor in colorectal carcinoma. Positively regulates PDPK1 kinase activity by stimulating its dissociation from the 14-3-3 protein YWHAQ which acts as a negative regulator.
Product Categories/Family for anti-Smad2 antibody	Signal Transduction; Signaling Pathway; Nuclear Signaling; smads; Epigenetics and Nuclear Signaling; Nuclear Signaling Pathways; Stem Cells; TGF Beta; Cytoplasmic; Cancer; Growth Factors; tgf

NCBI AND UNIPROT INFORMATION

NCBI GI #	51173730
NCBI GeneID	4087
NCBI Accession #	NP_001003652.1
NCBI GenBank Nucleotide #	NM_001003652.3
UniProt Accession #	Q15796
Molecular Weight	52306 MW
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

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://www.aaabiotech.com/monoclonal/smad2-antibody-western-blot-immunocytochemistry-immunofluorescence-flow-cytometry-elisa/46869>