

Rabbit anti-Human, Mouse Smad1 Monoclonal Antibody | anti-Smad1 antibody

Anti-Smad1 Rabbit Monoclonal Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA46981	Rabbit	Human, Mouse	Western Blot, Immunocytochemistry, Immunohistochemistry, Immunofluorescence

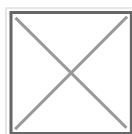
PRODUCT SYNONYMS

Smad1; Monoclonal Antibody; Anti-Smad1 Rabbit Monoclonal Antibody; Mothers against decapentaplegic homolog 1; MAD homolog 1; Mothers against DPP homolog 1; JV4-1; Mad-related protein 1; SMAD family member 1; SMAD 1; hSMAD1; Transforming growth factor-beta-signaling protein 1; BSP-1; SMAD1; BSP1; MADH1; MADR1; anti-Smad1 antibody

PRODUCT SPECIFICATIONS

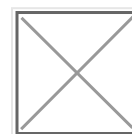
Host	Rabbit
Reactivity	Human, Mouse
Clonality	Monoclonal
Purity/Purification	Affinity-chromatography
Form/Format	Liquid
Sequence Length	137
Applicable Applications for anti-Smad1 antibody	WB (Western Blot), ICC (Immunocytochemistry), IHC (Immunohistochemistry), IF (Immunofluorescence)
Immunogen	A synthesized peptide derived from human Smad1
Subcellular Localization	Cytoplasm. Nucleus. Cytoplasmic in the absence of ligand. Migrates to the nucleus when complexed with SMAD4. Co-localizes with LEMD3 at the nucleus inner membrane.
Tissue Specificity	Ubiquitous. Highest expression seen in the heart and skeletal muscle.
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.

IMAGES



WB (Western Blot)

Western blot analysis of Smad1 expression in HeLa cell lysate (AAA46981). 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-SMAD1 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 SMAD1



IHC (Immunohistochemistry)

Immunohistochemical analysis of paraffin-embedded human kidney, using Smad1 Antibody (AAA46981). SMAD1 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-SMAD1 Antibody (AAA46981) 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.

ADDITIONAL INFORMATION

Related Product Information for anti-Smad1 antibody	Transcriptional modulator activated by BMP (bone morphogenetic proteins) type 1 receptor kinase. SMAD1 is a receptor-regulated SMAD (R-SMAD). SMAD1/OAZ1/PSMB4 complex mediates the degradation of the CREBBP/EP300 repressor SNIP1. May act synergistically with SMAD4 and YY1 in bone morphogenetic protein (BMP)-mediated cardiac-specific gene expression.
Product Categories/Family for anti-Smad1 antibody	Signal Transduction; Signaling Pathway; Nuclear Signaling; smads; Epigenetics and Nuclear Signaling; Nuclear Signaling Pathways; Stem Cells; TGF Beta; Cytoplasmic; Cancer; Growth Factors; TGF; Cancer Metabolism; Response to Hypoxia; Metabolism; Pathways a

NCBI AND UNIPROT INFORMATION

NCBI GI #	51173727
NCBI GeneID	4086
NCBI Accession #	NP_001003688.1
NCBI GenBank Nucleotide #	NM_001003688.1
UniProt Accession #	Q15797; Q16636; Q9UFT8; A8KAJ0; D3DNZ9
Molecular Weight	52260 MW
NCBI Official Full Name	mothers against decapentaplegic homolog 1
NCBI Official Synonym Full Names	SMAD family member 1
NCBI Official Symbol	SMAD1
NCBI Official Synonym Symbols	BSP1; JV41; BSP-1; JV4-1; MADH1; MADR1
NCBI Protein Information	mothers against decapentaplegic homolog 1
UniProt Protein Name	Mothers against decapentaplegic homolog 1
UniProt Gene Name	SMAD1
UniProt Synonym Gene Names	BSP1; MADH1; MADR1; MAD homolog 1; Mothers against DPP homolog 1; SMAD 1; Smad1; hSMAD1; BSP-1

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.