

Rabbit anti-Human SMAD3 Polyclonal Antibody | anti-SMAD3 antibody

SMAD3 Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA18875	Rabbit	Human	ELISA, Western Blot, Immunohistochemistry, Immunoprecipitation, Immunofluorescence

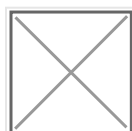
PRODUCT SYNONYMS

SMAD3; Polyclonal Antibody; SMAD3 Antibody; Mothers against decapentaplegic homolog 3 (MAD homolog 3) (Mad3) (Mothers against DPP homolog 3) (hMAD-3) (JV15-2) (SMAD family member 3) (SMAD3) (Smad3) (hSMAD3); MADH3; anti-SMAD3 antibody

PRODUCT SPECIFICATIONS

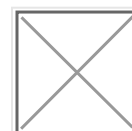
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Isotype	IgG
Purity/Purification	Antigen Affinity Purified
Form/Format	Liquid; PBS with 0.02% sodium azide, 50% glycerol, pH7.3.
Sequence Length	320
Applicable Applications for anti-SMAD3 antibody	ELISA, WB (Western Blot), IHC (Immunohistochemistry), IP (Immunoprecipitation), IF (Immunofluorescence)
Application Notes	Recommended dilution WB: 1:1000-5000 IHC: 1:20-1:500 IF: 1:50-1:200 IP: 1:200-1:2000
Conjugate	Non-conjugated
Research Area	Signal Transduction
Immunogen	Recombinant human Mothers against decapentaplegic homolog 3 protein (1-230aa)
Santa Cruz Alternative	Potential replacement for Santa Cruz Biotechnology antibody catalog# sc-8332
Preparation and Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.

IMAGES



IF (Immunofluorescence)

Immunofluorescence staining of A549 cells with AAA18875 at 1:129, counter-stained with DAPI. The cells were fixed in 4% formaldehyde, permeabilized using 0.2% TritonX-100 and blocked in 10% normal Goat Serum. The cells were then incubated with the antibody overnight at 4°C. The secondary antibody was Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



IHC (Immunohistochemistry)

IHC image of AAA18875 diluted at 1:388 and staining in paraffin-embedded human adrenal gland tissue performed on a Leica Bond™ system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4°C overnight. The primary is detected by abiotinylated secondary antibody and visualized using an HRP conjugated SP system.



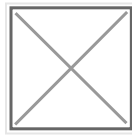
IP (Immunoprecipitation)

Immunoprecipitating SMAD3 in Jurkat whole cell lysateLane 1: Rabbit monoclonal IgG(1ug)instead of AAA18875 in Jurkat whole cell lysate. For western blotting, a HRP-conjugated anti-rabbit IgG, specific to the non-reduced form of IgG was used as the Secondary antibody (1/50000)Lane 2: AAA18875(4ug)+ Jurkat whole cell lysate(500ug)Lane 3: Jurkat whole cell lysate (20ug)



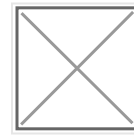
IHC (Immunohistochemistry)

Immunohistochemistry of paraffin-embedded human colon cancer using AAA18875 at dilution 1:100



IHC (Immunohistochemistry)

Immunohistochemistry of paraffin-embedded human breast cancer using AAA18875 at dilution 1:100



WB (Western Blot)

Western blotAll lanes: SMAD3 antibody at 8 ug/mLane 1: Jurkat whole cell lysateLane 2: A431 whole cell lysateSecondaryGoat polyclonal to rabbit at 1/10000 dilutionPredicted band size: 49,44,36,26 kDaObserved band size: 49kDa

ADDITIONAL INFORMATION

Related Product Information for anti-SMAD3 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 SMAD3/SMAD4 complex, activates transcription. Also can form a SMAD3/SMAD4/JUN/FOS complex at the AP-1/SMAD site to regulate TGF-beta-mediated transcription. Has an inhibitory effect on wound healing probably by modulating both growth and migration of primary keratinocytes and by altering the TGF-mediated chemotaxis of monocytes. This effect on wound healing appears to be hormone-sensitive. Regulator of chondrogenesis and osteogenesis and inhibits early healing of bone fractures. Positively regulates PDPK1 kinase activity by stimulating its dissociation from the 14-3-3 protein YWHAQ which acts as a negative regulator.

NCBI AND UNIPROT INFORMATION

NCBI GI #	223029440
NCBI GeneID	4088
NCBI Accession #	NP_001138574.1
NCBI GenBank Nucleotide #	NM_001145102.1
UniProt Accession #	P84022 ; O09064 ; O09144 ; O14510 ; O35273 ; Q92940 ; Q93002 ; A8K4B6 ; B7Z4Z5 ; B7Z6M9 ; B7Z9Q2 ; F5H383
NCBI Official Full Name	mothers against decapentaplegic homolog 3 isoform 2
NCBI Official Synonym Full Names	SMAD family member 3
NCBI Official Symbol	SMAD3
NCBI Official Synonym Symbols	LDS3; LDS1C; MADH3; JV15-2; HSPC193; HsT17436
NCBI Protein Information	mothers against decapentaplegic homolog 3
UniProt Protein Name	Mothers against decapentaplegic homolog 3
UniProt Gene Name	SMAD3
UniProt Synonym Gene Names	MADH3; MAD homolog 3; Mad3; Mothers against DPP homolog 3; hMAD-3; SMAD 3; Smad3; hSMAD3
UniProt Entry Name	SMAD3_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.

