

Rabbit Anti-SMAD5 antibody

SL13890R

Product Name:	SMAD5
Chinese Name:	细胞Signal transduction分子SMAD5抗体
Alias:	Dwfc; hSmad 5; hSmad5; JV5 1; JV5-1; MAD homolog 5; MAD mothers against decapentaplegic homolog 5; MAD, mothers against decapentaplegic homolog 5; MADH 5; MADH5; Mothers against decapentaplegic homolog 5; Mothers against DPP homolog 5; MusMLP; SMA and MAD related protein 5; SMAD 5; SMAD family member 5; SMAD mothers against DPP homolog 5; Smad5; SMAD5_HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Dog, Pig, Cow, Rabbit, Sheep, Guinea Pig,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	51kDa
Cellular localization:	The nucleuscytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human SMAD5:151-250/465
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 °C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	<u>PubMed</u>
Product Detail:	The protein encoded by this gene is involved in the transforming growth factor beta signaling pathway that results in an inhibition of the proliferation of hematopoietic progenitor cells. The encoded protein is activated by bone morphogenetic proteins type 1

receptor kinase, and may be involved in cancer. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Feb 2014]

Function:

Transcriptional modulator activated by BMP (bone morphogenetic proteins) type 1 receptor kinase. SMAD5 is a receptor-regulated SMAD (R-SMAD).

Subunit:

May form trimers with the co-SMAD SMAD4. Interacts with PEBP2-alpha subunit and SMURF1. Interacts with SUV39H1 and SUV39H2. Interacts (via MH2 domain) with LEMD3. Interacts with WWP1.

Subcellular Location:

Cytoplasm. Nucleus. Cytoplasmic in the absence of ligand. Migrates to the nucleus when complexed with SMAD4.

Tissue Specificity:

Ubiquitous.

Post-translational modifications:

Phosphorylated on serine by BMP (bone morphogenetic proteins) type 1 receptor kinase. Ubiquitin-mediated proteolysis by SMAD-specific E3 ubiquitin ligase SMURF1.

Similarity:

Belongs to the dwarfin/SMAD family.

Contains 1 MH1 (MAD homology 1) domain.

Contains 1 MH2 (MAD homology 2) domain.

SWISS:

O99717

Gene ID:

4090

Database links:

Entrez Gene: 4090 Human

Entrez Gene: 17129 Mouse

Entrez Gene: 59328 Rat

Omim: 603110 Human

SwissProt: O99717 Human

SwissProt: P97454 Mouse

SwissProt: Q9R1V3 Rat

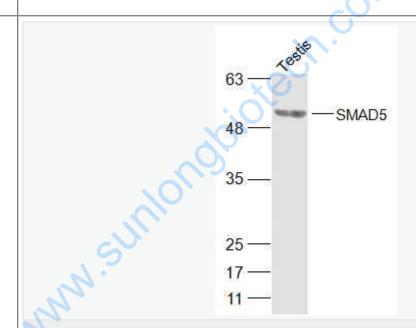
Unigene: 167700 Human

Unigene: 272920 Mouse

Unigene: 146857 Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.



Picture:

Sample:

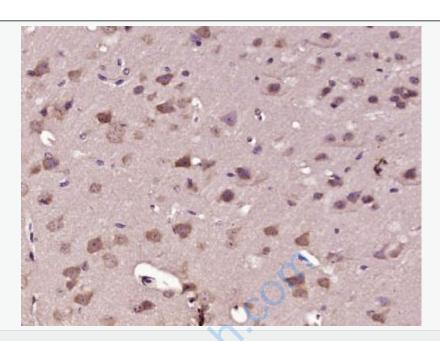
Testis (Mouse) Lysate at 40 ug

Primary: Anti-SMAD5 (SL13890R) at 1/500 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 51 kD

Observed band size: 51 kD



Paraformaldehyde-fixed, paraffin embedded (mouse brain tissue); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (SMAD5) Polyclonal Antibody, Unconjugated (SL13890R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.