

Smad5 Monoclonal Antibody

Catalog No: YM1093

Reactivity: Human; Mouse; Rat; Bovine; Chicken; Pig; sheep

Applications: WB;IF;FCM

Target: Smad5

Fields: >>TGF-beta signaling pathway;>>Signaling pathways regulating pluripotency of

stem cells

Q99717

P97454

Gene Name: SMAD5

Protein Name: Mothers against decapentaplegic homolog 5

Human Gene Id: 4090

Human Swiss Prot

No:

Mouse Gene Id: 17129

Mouse Swiss Prot

No:

Rat Gene Id: 59328

Rat Swiss Prot No: Q9R1V3

Immunogen: Purified recombinant human Smad5 (C-terminus) protein fragments expressed

in E.coli.

Specificity: Smad5 Monoclonal Antibody detects endogenous levels of Smad5 protein.

Formulation : Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Monoclonal, Mouse

Dilution: WB 1:1000 - 1:2000. IF 1:100 - 1:500. Flow cytometry: 1:100 - 1:200. Not yet

tested in other applications.



Purification : Affinity purification

Concentration: 1 mg/ml

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Molecularweight: 52kD

Cell Pathway: TGF-beta;

Background: 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: function:Transcriptional modulator activated by BMP (bone morphogenetic

proteins) type 1 receptor kinase. SMAD5 is a receptor-regulated SMAD (R-SMAD).,PTM:Phosphorylated on serine by BMP (bone morphogenetic proteins) type 1 receptor kinase.,PTM:Ubiquitin-mediated proteolysis by SMAD-specific E3

ubiquitin ligase SMURF1., similarity: Belongs to the dwarfin/SMAD

family.,similarity:Contains 1 MH1 (MAD homology 1) domain.,similarity:Contains 1 MH2 (MAD homology 2) domain.,subcellular location:Cytoplasmic in the absence of ligand. Migrates to the nucleus when complexed with SMAD4.,subunit:May form trimers with the co-SMAD SMAD4. Interacts with PEBP2-alpha subunit and SMURF1. Interacts with SUV39H1 and SUV39H2.,tissue specificity:Ubiquitous.,

Subcellular Location:

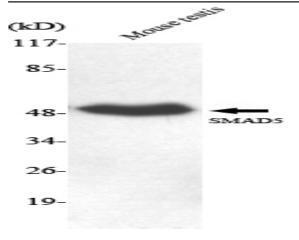
Cytoplasm. Nucleus. Cytoplasmic in the absence of ligand. Migrates to the

nucleus when complexed with SMAD4.

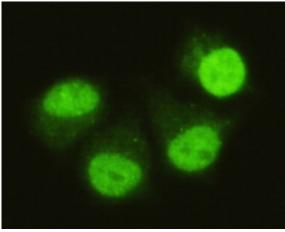
Expression: Ubiquitous.

Products Images

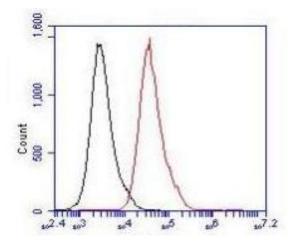
2/3



Western Blot analysis using Smad5 Monoclonal Antibody against mouse testis lysate.



Immunofluorescence analysis of HeLa cells using Smad5 Monoclonal Antibody.



Flow cytometric analysis of Jurkat cells stained with Smad5 Monoclonal Antibody (red), followed by FITC-conjugated goat anti-mouse IgG. Black line histogram represents the isotype control, normal mouse IgG.