

Smad6 Monoclonal Antibody

Catalog No: YM0585

Reactivity: Human

Applications: WB;ELISA

Target: Smad6

Fields: >>TGF-beta signaling pathway

Gene Name: SMAD6

Protein Name: Mothers against decapentaplegic homolog 6

Human Gene Id: 4091

Human Swiss Prot

O43541

No:

Mouse Swiss Prot

O35182

No:

Immunogen: Purified recombinant fragment of human Smad6 expressed in E. Coli.

Specificity: Smad6 Monoclonal Antibody detects endogenous levels of Smad6 protein.

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

Source: Monoclonal, Mouse

Dilution: WB 1:500 - 1:2000. ELISA: 1:10000. Not yet tested in other applications.

Purification : Affinity purification

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

Molecularweight: 53kD

Cell Pathway: TGF-beta;

1/2

P References:

1. J Biol Chem. 2006 Feb 10;281(6):3569-76.

2. Nat Immunol. 2006 Oct;7(10):1057-65.

3. J Med Genet. 2009 May;46(5):331-7.

Background:

The protein encoded by this gene belongs to the SMAD family of proteins, which are related to Drosophila 'mothers against decapentaplegic' (Mad) and C. elegans Sma. SMAD proteins are signal transducers and transcriptional modulators that mediate multiple signaling pathways. This protein functions in the negative regulation of BMP and TGF-beta/activin-signalling. Multiple transcript variants have been found for this gene.[provided by RefSeq, Sep 2014],

Function:

function:Antagonist of signaling by TGF-beta (transforming growth factor) type 1 receptor superfamily members; has been shown to inhibit selectively BMP (bone morphogenetic proteins) signaling by competing with the co-SMAD SMAD4 for receptor-activated SMAD1. SMAD6 is an inhibitory SMAD (I-SMAD) or antagonistic SMAD. Binds to regulatory elements in target promoter regions.,PTM:Phosphorylated by BMP type 1 receptor kinase and by PRKX.,similarity:Belongs to the dwarfin/SMAD family.,similarity:Contains 1 MH1 (MAD homology 1) domain.,similarity:Contains 1 MH2 (MAD homology 2) domain.,subunit:Interacts with NEDD4L (By similarity). Interacts with RNF111 and AXIN1. Interacts with TGF-beta type I receptor superfamily members, SMAD1, HOXC8 and HOXC9. Interacts with STAMBP and PRKX.,tissue specificity:Ubiquitous in various organs, with higher levels in lung. Isoform B is upregulated in diseased he

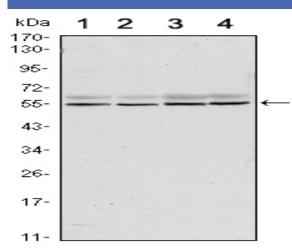
Subcellular Location:

Nucleus.

Expression:

Ubiquitous in various organs, with higher levels in lung. Isoform B is upregulated in diseased heart tissue.

Products Images



Western Blot analysis using Smad6 Monoclonal Antibody against A431 (1), A431 (2), HeLa (3) and Jurkat (4) cell lysate.