

## Smad6 Monoclonal Antibody

<b>Catalog No :</b>	YM0585
<b>Reactivity :</b>	Human
<b>Applications :</b>	WB;ELISA
<b>Target :</b>	Smad6
<b>Fields :</b>	>>TGF-beta signaling pathway
<b>Gene Name :</b>	SMAD6
<b>Protein Name :</b>	Mothers against decapentaplegic homolog 6
<b>Human Gene Id :</b>	4091
<b>Human Swiss Prot No :</b>	O43541
<b>Mouse Swiss Prot No :</b>	O35182
<b>Immunogen :</b>	Purified recombinant fragment of human Smad6 expressed in E. Coli.
<b>Specificity :</b>	Smad6 Monoclonal Antibody detects endogenous levels of Smad6 protein.
<b>Formulation :</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source :</b>	Monoclonal, Mouse
<b>Dilution :</b>	WB 1:500 - 1:2000. ELISA: 1:10000. Not yet tested in other applications.
<b>Purification :</b>	Affinity purification
<b>Storage Stability :</b>	-15°C to -25°C/1 year(Do not lower than -25°C)
<b>Molecularweight :</b>	53kD
<b>Cell Pathway :</b>	TGF-beta;

**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 up-regulated in diseased he

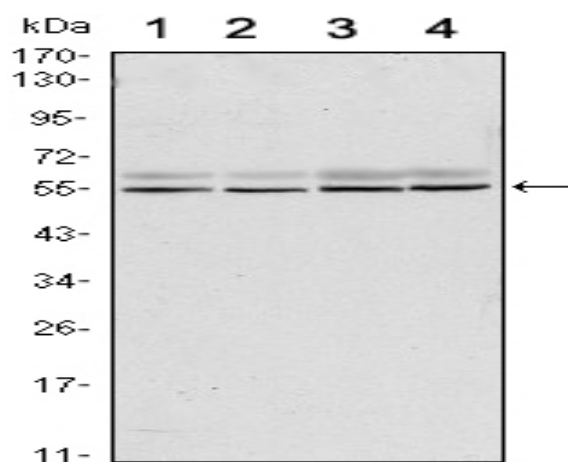
**Subcellular Location :**

Nucleus .

**Expression :**

Ubiquitous in various organs, with higher levels in lung. Isoform B is up-regulated 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.