

## SMAD2 Polyclonal Antibody

Catalog No. E-AB-70367

**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

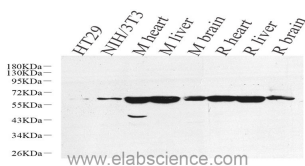
### Description

<b>Reactivity</b>	Human,Mouse,Rat
<b>Immunogen</b>	Recombinant protein corresponding to MouseSmad2
<b>Host</b>	Rabbit
<b>Isotype</b>	IgG
<b>Purification</b>	Affinity purification
<b>Conjugation</b>	Unconjugated
<b>Buffer</b>	PBS with 0.02% sodium azide, 1% protective protein and 50% glycerol, pH7.4

### Applications Recommended Dilution

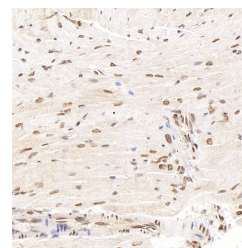
<b>WB</b>	1:500-1:2000
<b>IHC</b>	1:300-1:800

### Data

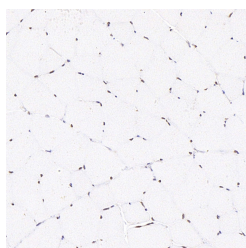


Western Blot analysis of various samples using SMAD2 Polyclonal Antibody at dilution of 1:800.

**Observed Mw:60kDa**  
**Calculated Mw:60kDa**



Immunohistochemistry analysis of paraffin-embedded mouse heart using SMAD2 Polyclonal Antibody at dilution of 1:400.



Immunohistochemistry analysis of paraffin-embedded rat skeletal muscle using SMAD2 Polyclonal Antibody at dilution of 1:400.

### Preparation & Storage

**Storage** Store at -20°C. Avoid freeze / thaw cycles.

### For Research Use Only

## Background

The protein encoded by this gene belongs to the SMAD, a family of proteins similar to the gene products of the *Drosophila* gene 'mothers against decapentaplegic' (Mad) and the *C. elegans* gene Sma. SMAD proteins are signal transducers and transcriptional modulators that mediate multiple signaling pathways. This protein mediates the signal of the transforming growth factor (TGF)-beta, and thus regulates multiple cellular processes, such as cell proliferation, apoptosis, and differentiation. This protein is recruited to the TGF-beta receptors through its interaction with the SMAD anchor for receptor activation (SARA) protein. In response to TGF-beta signal, this protein is phosphorylated by the TGF-beta receptors. The phosphorylation induces the dissociation of this protein with SARA and the association with the family member SMAD4. The association with SMAD4 is important for the translocation of this protein into the nucleus, where it binds to target promoters and forms a transcription repressor complex with other cofactors. This protein can also be phosphorylated by activin type 1 receptor kinase, and mediates the signal from the activin. Alternatively spliced transcript variants have been observed for this gene.

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