SMAD2 Polyclonal Antibody

catalog number: E-AB-70367

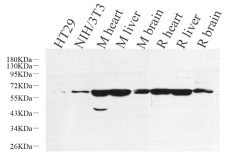
Note: *Centrifuge before opening to ensure complete recovery of vial contents.*

Description

Reactivity	Human;Mouse;Rat
Immunogen	Recombinant protein corresponding to MouseSmad2
Host	Rabbit
Isotype	IgG
Purification	Affinity purification
Conjugation	Unconjugated
Buffer	Phosphate buffered solution, pH 7.4, containing 0.05% stabilizer, 1% protein protectant and 50% glycerol.

Applications	Recommended Dilution
WB	1:500-1:2000
IHC	1:300-1:800

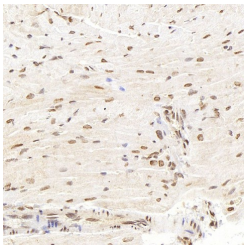
Data



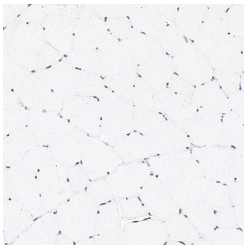
Western Blot analysis of various samples using SMAD2 Polyclonal Antibody at dilution of 1:800.

Observed-MW:60 kDa

Calculated-MW:60 kDa



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 Valid for 12 months. Avoid freeze / thaw cycles.
Shipping	The product is shipped with ice pack,upon receipt,store it immediately at the temperature recommended.

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.