

[KO Validated] SMAD2 Polyclonal Antibody

Catalog No.	A7699	Category	Polyclonal Antibodies
Applications	WB, IHC, IF	Observed MW	60kDa
Cross-reactivity	Human, Mouse, Rat	Calculated MW	48kDa/52kDa

Immunogen Information

Immunogen	A synthetic peptide corresponding to a sequence within amino acids 1-100 of human SMAD2 (NP_001003652.1).
Gene ID	4087
Swiss prot	Q15796
Synonyms	SMAD2; JV18; JV18-1; MADH2; MADR2; hMAD-2; hSMAD2; SMAD family member 2

Product information

Source	Rabbit
Isotype	IgG
Purification method	Affinity purification
Storage	Store at -20°C. Avoid freeze / thaw cycles. Buffer: PBS with 0.02% sodium azide, 50% glycerol, pH7.3.

Background

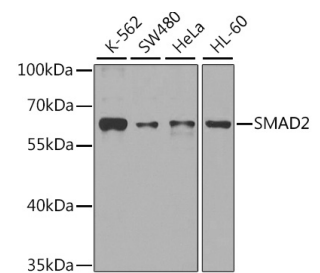
The protein encoded by this gene belongs to the SMAD, a family of proteins similar to the gene products of the *Drosophila* gene 'mothers against decapentaplegic' (Mad) and the *C. elegans* gene Sma. SMAD proteins are signal transducers and transcriptional modulators that mediate multiple signaling pathways. 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.

Recommended Dilutions

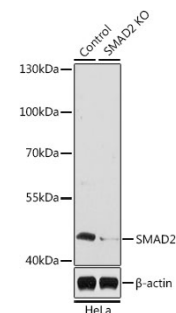
WB 1:500 -
1:2000

IHC 1:50 -
1:200

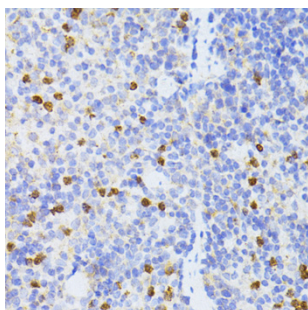
IF 1:50 -
1:200



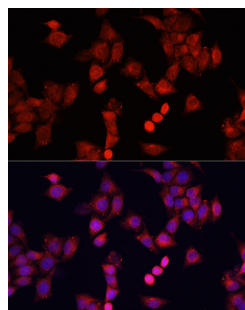
Western blot - [KO Validated] SMAD2 Polyclonal Antibody (A7699)



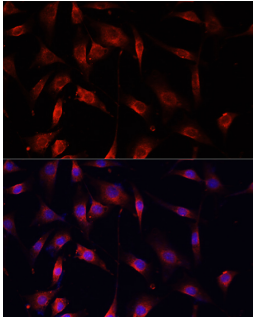
Western blot - [KO Validated] SMAD2 Polyclonal Antibody (A7699)



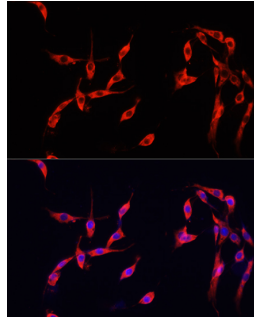
Immunohistochemistry - [KO Validated] SMAD2 Polyclonal Antibody (A7699)



Immunofluorescence - [KO Validated] SMAD2 Polyclonal Antibody (A7699)



Immunofluorescence - [KO Validated]
SMAD2 Polyclonal Antibody (A7699)



Immunofluorescence - [KO Validated]
SMAD2 Polyclonal Antibody (A7699)