

SMAD2 Polyclonal Antibody

Catalog No: #31308

Package Size: #31308-1 50ul #31308-2 100ul

Orders: order@signalwayantibody.com

Support: tech@signalwayantibody.com

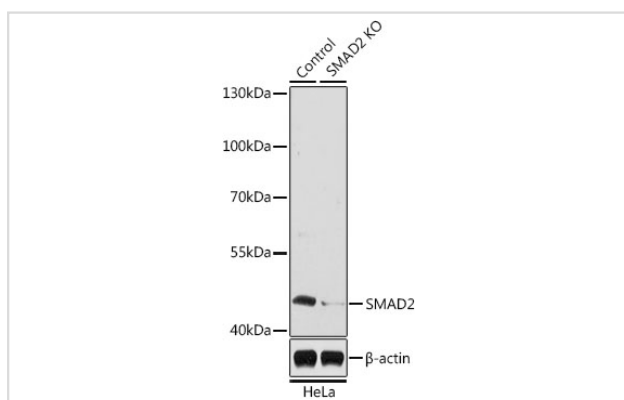
Description

Product Name	SMAD2 Polyclonal Antibody
Host Species	Rabbit
Clonality	Polyclonal
Isotype	IgG
Purification	Affinity purification
Applications	WB,IHC,IF
Species Reactivity	Human,Mouse,Rat
Immunogen Description	A synthetic peptide of human SMAD2 (NP_001003652.1).
Other Names	SMAD2; JV18; JV18-1; MADH2; MADR2; hMAD-2; hSMAD2; SMAD family member 2
Accession No.	Swiss-Prot#:Q15796NCBI Gene ID:4087
Uniprot	Q15796
GeneID	4087;
Calculated MW	60kDa
Formulation	Avoid freeze / thaw cycles. Buffer: PBS with 50% glycerol, pH7.4.
Storage	Store at -20°C

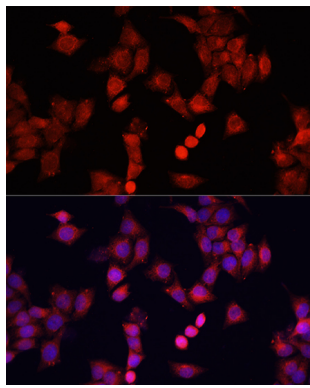
Application Details

WB □ 1:500 - 1:2000 IHC □ 1:50 - 1:200 IF □ 1:50 - 1:200

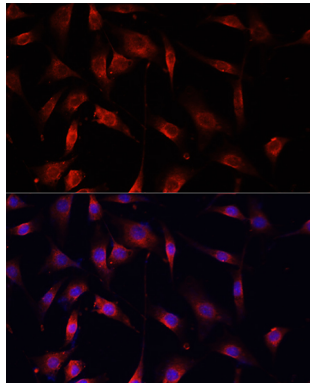
Images



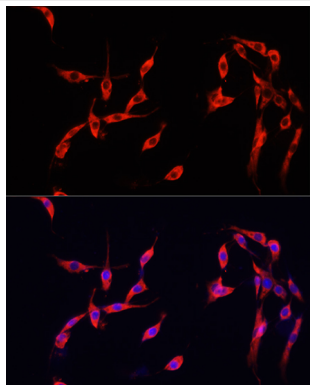
Western blot analysis of extracts from normal (control) and SMAD2 knockout (KO) HeLa cells, using SMAD2 at 1:1000 dilution.



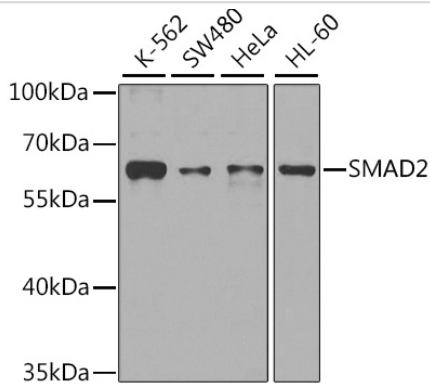
Immunofluorescence analysis of HeLa cells using SMAD2 at dilution of 1:100. Blue: DAPI for nuclear staining.



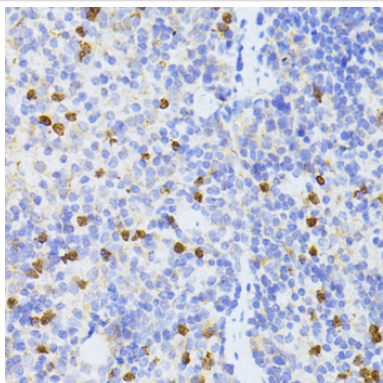
Immunofluorescence analysis of NIH/3T3 cells using SMAD2 at dilution of 1:100. Blue: DAPI for nuclear staining.



Immunofluorescence analysis of PC-12 cells using SMAD2 at dilution of 1:100. Blue: DAPI for nuclear staining.



Western blot analysis of extracts of various cell lines, using SMAD2 at 1:1000 dilution.



Immunohistochemistry of paraffin-embedded mouse spleen using SMAD2 at dilution of 1:100 (40x lens).

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.

Note: This product is for in vitro research use only