

[KO Validated] Smad2 Rabbit Polyclonal Antibody

CAB7699



Product Information

Size:

20uL, 50uL, 100uL, 200uL

Observed MW:

60kDa

Calculated MW:

48kDa/52kDa

Applications:

WB IHC IF

Reactivity:

Human, Mouse, Rat

Antibody Information

Recommended dilutions:

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

Source:

Rabbit

Isotype:

IgG

Purification:

Affinity purification

Protein 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.

Immunogen information

Gene ID:

4087

Uniprot

Q15796

Synonyms:

JV18; JV18-1; MADH2; MADR2; hMAD-2; hSMAD2; Smad2; SMAD2

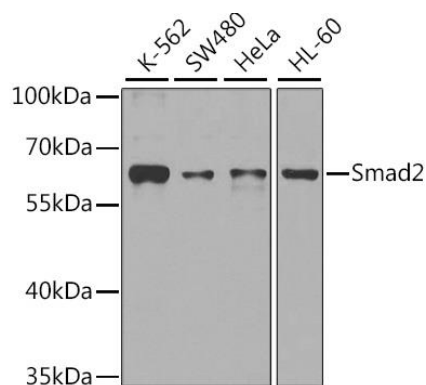
Immunogen:

A synthetic peptide corresponding to a sequence within amino acids 1-100 of human Smad2 (NP_001003652.1).

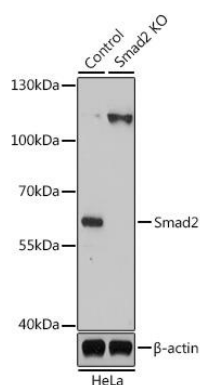
Storage:

Store at -20°C. Avoid freeze / thaw cycles. Buffer: PBS with 0.02% sodium azide, 50% glycerol, pH7.3.

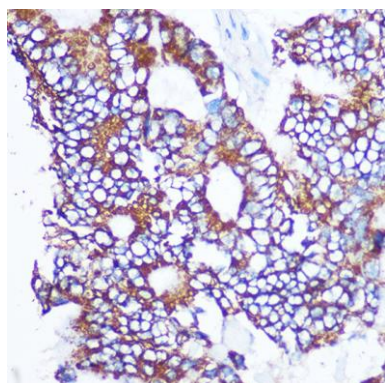
Product Images



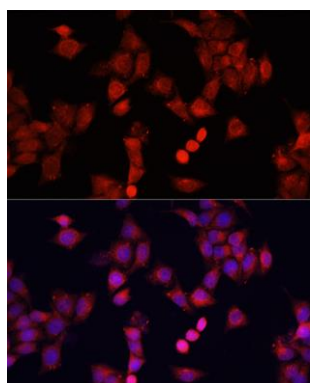
Western blot analysis of extracts of various cell lines, using Smad2 antibody (CAB7699) at 1:1000 dilution. Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (CABS014) at 1:10000 dilution. Lysates/proteins: 25ug per lane. Blocking buffer: 3% nonfat dry milk in TBST. Detection: ECL Basic Kit (CABM00020). Exposure time: 10s.



Western blot analysis of extracts from normal (control) and Smad2 knockout (KO) HeLa cells, using Smad2 antibody (CAB7699) at 1:1000 dilution. Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (CABS014) at 1:10000 dilution. Lysates/proteins: 25ug per lane. Blocking buffer: 3% nonfat dry milk in TBST. Detection: ECL Basic Kit (CABM00020). Exposure time: 5min.



Immunohistochemistry of paraffin-embedded Human colon carcinoma using [KO Validated] Smad2 Rabbit pAb (CAB7699) at dilution of 1:100 (40x lens).



Immunofluorescence analysis of HeLa cells using Smad2 antibody (CAB7699) at dilution of 1:100. Blue: DAPI for nuclear staining.