# Smad2 Rabbit pAb

**Catalog NO.: A0440** **8 Publications**

## Basic Information

### Observed MW
50kDa

### Calculated MW
52kDa

### Category
Polyclonal Antibodies

### Applications
WB, IHC-P, ELISA

### Cross-Reactivity
Human, Mouse

### Conjugation
Unconjugated

## 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 - 1:1000 |
| **IHC-P** | 1:50 - 1:200 |

### ELISA
Recommended starting concentration is 1 μg/mL. Please optimize the concentration based on your specific assay requirements.

## Immunogen Information

### Gene ID
4087

### Swiss Prot
Q15796

### Immunogen
Recombinant protein (or fragment).This information is considered to be commercially sensitive.

### Synonyms
JV18; LDS6; CHTD8; MADH2; MADR2; JV18-1; hMAD-2; hSMAD2; Smad2

## Contact

## Product Information

order@abclonal.com
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www.abclonal.com

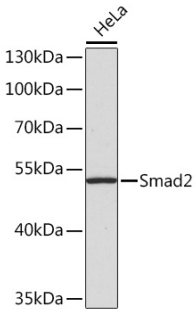
**Source**
Rabbit

**Isotype**
IgG

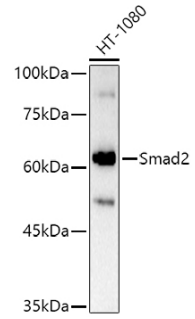
**Purification**
Affinity purification

**Storage**
Store at -20°C. Avoid freeze / thaw cycles.
Buffer: PBS containing 50% glycerol, preserved with proclin300 or sodium azide (as specified on the Certificate of Analysis), pH 7.3.

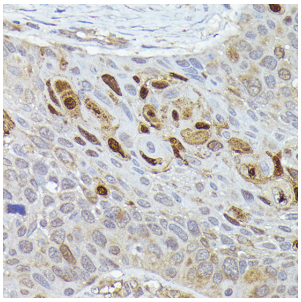
## Validation Data

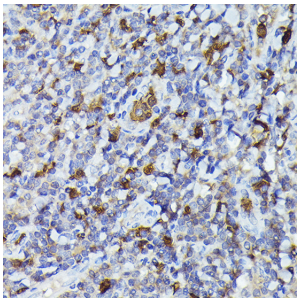



Western blot analysis of lysates from HeLa cells, using Smad2 Rabbit pAb (A0440).
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.
Lysates/proteins: 25µg per lane.
Blocking buffer: 3% nonfat dry milk in TBST.




Western blot analysis of lysates from HT-1080 cells, using Smad2 Rabbit pAb (A0440) at 1:1000 dilution.
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.
Lysates/proteins: 25µg per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
Detection: ECL Basic Kit (RM00020).
Exposure time: 180s.





Immunohistochemistry analysis of paraffin-embedded Human esophageal cancer using Smad2 Rabbit pAb (A0440) at dilution of 1:100 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate buffer (pH 6.0) prior to IHC staining.

Immunohistochemistry analysis of paraffin-embedded Human tonsil using Smad2 Rabbit pAb (A0440) at dilution of 1:100 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate buffer (pH 6.0) prior to IHC staining.