

## Product datasheet for **TA319186**

### SMAD2 Rabbit Polyclonal Antibody

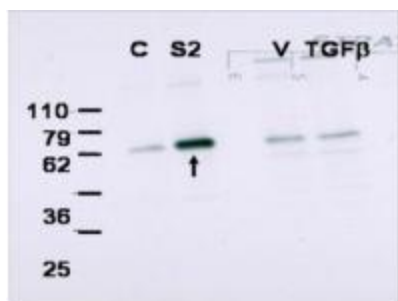
#### Product data:

Product Type:	Primary Antibodies
Applications:	WB
Recommended Dilution:	ELISA: 1:100,000, WB: 1:1,000 - 1:3,000, IP: User Optimized
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	This affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to an internal region of human Smad23 protein.
Formulation:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Concentration:	lot specific
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Gene Name:	SMAD family member 2
Database Link:	<a href="#">NP_001003652</a> <a href="#">Entrez Gene 17126 Mouse</a> <a href="#">Entrez Gene 29357 Rat</a> <a href="#">Entrez Gene 4087 Human</a> <a href="#">Q15796</a>
Synonyms:	hMAD-2; hSMAD2; JV18; JV18-1; MADH2; MADR2



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- Note:** This antibody is suitable for Cancer, Immunology and Nuclear Signaling research. Smad2 (also known as Mothers against decapentaplegic homolog 2, Mothers against DPP homolog 2, Mad2, hMAD-2 or hSMAD2) is a member of the Smad family of proteins which are 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
- Protein Families:** Cancer stem cells, Druggable Genome, Embryonic stem cells, ES Cell Differentiation/IPS, Stem cell relevant signaling - JAK/STAT signaling pathway, Stem cell relevant signaling - TGFb/BMP signaling pathway, Transcription Factors
- Protein Pathways:** Adherens junction, Cell cycle, Colorectal cancer, Pancreatic cancer, Pathways in cancer, TGF-beta signaling pathway, Wnt signaling pathway

**Product images:**

WB using Anti-Smad2 to detect over-expressed Smad2 in COS cells (arrow). Lane C shows mock infection of COS cells with lentiviral vector alone. Lane S2 shows detection of Smad2 in lysates of COS transfected with Smad2. Lane V contains lysates of MDA-MB231 cells treated with vehicle; the next lane contains lysates of MDA-MB231 cells treated with TGF. Preincubation of the antibody with immunizing peptide (data not shown) completely blocks specific band staining. The primary antibody at 1:2500.