

## SMAD2 polyclonal antibody - Classic

**Cat. No.** C15410273

**Type:** Polyclonal

**Source:** Rabbit

**Lot #:** 001

**Size:** 100 µg

**Concentration:** 0.55 µg/µl

**Specificity:** Human, mouse, rat

**Purity:** Affinity purified

**Storage:** Store at -20°C; for long storage, store at -80°C. Avoid multiple freeze-thaw cycles.

**Precautions:** This product is for research use only. Not for use in diagnostic or therapeutic procedures.

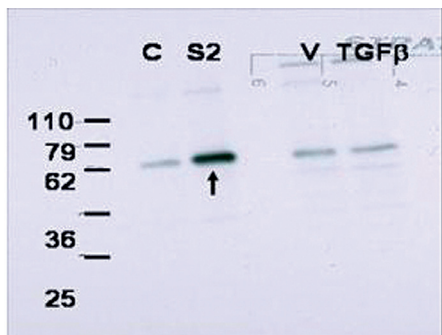
### Applications

	Suggested dilution	Results
ELISA	1:100,000	
Western blot	1:1,000 - 1:3,000	Figure 1

### Target description

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.

## Results



**Figure 1. SMAD2 antibody Western blot results**

Western blot using the Diagenode antibody against 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 TGFβ. Low levels of staining in control lanes correspond to detection of endogenous SMAD2. The membrane was probed with the primary antibody at a 1:2500 dilution.

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