



**Category:** Monoclonal Antibodies  
**Product Name:** Mouse Monoclonal Antibody to SMAD2

**Catalog Number:** MAB-606030242

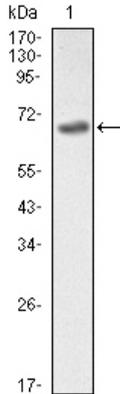


Figure 1: Western blot analysis using SMAD2 mAb against recombinant protein.

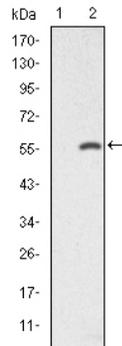


Figure 2: Western blot analysis using SMAD2 mAb against HEK293 (1) and SMAD2-hIgGfC transfected HEK293 (2) cell lysate.

**Lot#:**  
**Clone#:** 5G7  
**Host and isotype:** Mouse IgG1  
**Size:** 0.1ml  
**MW:** 52kDa  
**Aliases:** JV18; MADH2; MADR2; JV18-1; hMAD-2; hSMAD2; MGC22139; MGC34440  
**Entrez Gene:** 4087  
**Species reactivity:** Human

**Description** 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 encoding the same protein have been observed.

**Immunogen** Purified recombinant fragment of human SMAD2 expressed in E. Coli.

**Application** Western Blotting: 1/500 - 1/2000.

Immunohistochemistry: 1/200 - 1/1000.

Immunofluorescence: 1/200 - 1/1000.

Flow cytometry: 1/200 - 1/400.

ELISA: Propose dilution 1/10000.

Not yet tested in other applications.

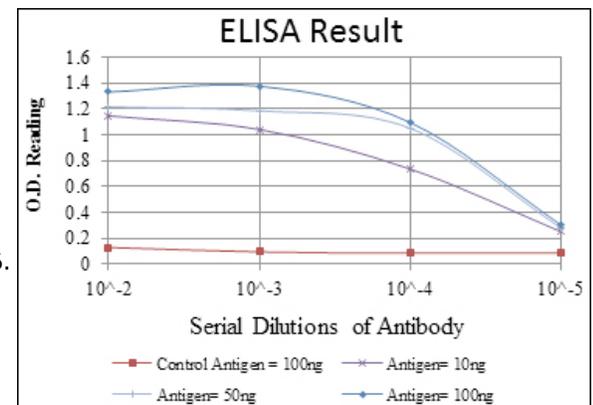
Determining optimal working dilutions by titration test.

**Formulation** Ascitic fluid containing 0.03% sodium azide.

**Storage** Store at 4°C, for long term storage, store at -20°C.

**Related product References** 1. J Biol Chem. 2009 Dec 4;284(49):34145-56.

2. Cloning Stem Cells. 2009 Sep;11(3):427-35.



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