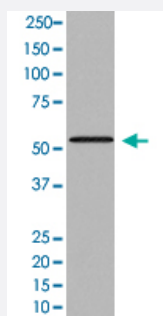


# SMAD2 monoclonal antibody, clone EFF-19

Catalog # MAB20718      Size 100 uL

## Applications



### Western Blot (Cell lysate)

Western Blot analysis of Jurkat cell lysate with SMAD2 monoclonal antibody, clone EFF-19 (Cat # MAB20718).

## Specification

**Product Description** Rabbit monoclonal antibody raised against synthetic peptide of human SMAD2.

**Immunogen** A synthetic peptide corresponding to human SMAD2.

**Host** Rabbit

**Theoretical MW (kDa)** 52.306

**Reactivity** Human

**Form** Liquid

**Purification** Affinity purification

**Isotype** IgG

**Recommend Usage**

- Flow Cytometry
- Immunocytochemistry (1:50-1:200)
- Immunofluorescence (1:50-1:200)
- Immunohistochemistry (1:50-1:200)
- Immunoprecipitation (1:50)
- Western Blot (1:1000-1:2000)

The optimal working dilution should be determined by the end user.

|                     |                                                                                                                                                                                       |
|---------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Storage Buffer      | In PBS, 150 mM NaCl, pH 7.4 (50% glycerol, 0.02% sodium azide).                                                                                                                       |
| Storage Instruction | Store at -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing. |
| Note                | This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.                                                                |

## Applications

- Western Blot (Cell lysate)

Western Blot analysis of Jurkat cell lysate with SMAD2 monoclonal antibody, clone EFF-19 (Cat # MAB20718).

- Immunohistochemistry

- Immunocytochemistry

- Immunofluorescence

- Immunoprecipitation

- Flow Cytometry

## Gene Info — SMAD2

|                    |                                                                |
|--------------------|----------------------------------------------------------------|
| Entrez GeneID      | <a href="#">4087</a>                                           |
| Protein Accession# | <a href="#">Q15796</a>                                         |
| Gene Name          | SMAD2                                                          |
| Gene Alias         | JV18, JV18-1, MADH2, MADR2, MGC22139, MGC34440, hMAD-2, hSMAD2 |
| Gene Description   | SMAD family member 2                                           |
| Omim ID            | <a href="#">601366</a>                                         |
| Gene Ontology      | <a href="#">Hyperlink</a>                                      |

**Gene Summary**

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. [provided by RefSeq]

**Other Designations**

MAD, mothers against decapentaplegic homolog 2|Mad protein homolog|Mad, mothers against decapentaplegic homolog 2|Mad-related protein 2|SMAD, mothers against DPP homolog 2|Sma- and Mad-related protein 2|mother against DPP homolog 2

**Pathway**

- [Adherens junction](#)
- [Cell cycle](#)
- [Colorectal cancer](#)
- [Pancreatic cancer](#)
- [Pathways in cancer](#)
- [TGF-beta signaling pathway](#)
- [Wnt signaling pathway](#)

**Disease**

- [Adenocarcinoma](#)
- [Cleft Lip](#)
- [Cleft Palate](#)
- [Colitis](#)
- [Colorectal Neoplasms](#)
- [Esophageal Neoplasms](#)

- [Genetic Predisposition to Disease](#)
- [Hypertension](#)
- [Inflammatory Bowel Diseases](#)
- [Liver Cirrhosis](#)
- [Obesity](#)
- [Osteoporosis](#)
- [Ovarian Failure](#)
- [Pancreatic cancer](#)
- [Pancreatic Neoplasms](#)
- [Polycystic Ovary Syndrome](#)
- [Puberty](#)
- [Thrombophilia](#)
- [Tobacco Use Disorder](#)