

## Rabbit anti-Human Smad2 Monoclonal Antibody | anti-SMAD2 antibody

[KO Validated] Smad2 Rabbit mAb

|                               |                       |                            |                                            |
|-------------------------------|-----------------------|----------------------------|--------------------------------------------|
| CATALOG #<br><b>AAA282980</b> | HOST<br><b>Rabbit</b> | REACTIVITY<br><b>Human</b> | APPLICATIONS<br><b>ELISA, Western Blot</b> |
|-------------------------------|-----------------------|----------------------------|--------------------------------------------|

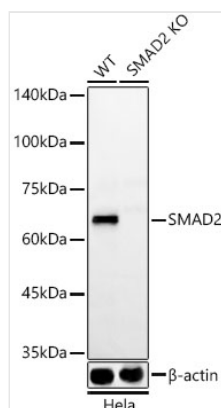
### PRODUCT SYNONYMS

Smad2; Monoclonal Antibody; [KO Validated] Smad2 Rabbit mAb; JV18; LDS6; CHTD8; MADH2; MADR2; JV18-1; hMAD-2; hSMAD2; d2; anti-SMAD2 antibody

### PRODUCT SPECIFICATIONS

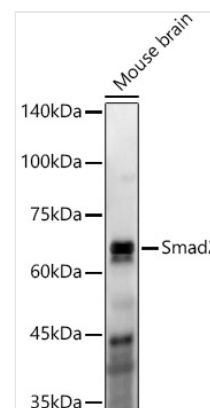
|                                                 |                                                                                                                   |
|-------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|
| Host                                            | Rabbit                                                                                                            |
| Reactivity                                      | Human                                                                                                             |
| Clonality                                       | Monoclonal                                                                                                        |
| Isotype                                         | IgG                                                                                                               |
| Purity/Purification                             | Affinity purification                                                                                             |
| Form/Format                                     | PBS with 0.05% proclin300, 0.05% BSA, 50% glycerol, pH7.3.                                                        |
| Sequence                                        | GWHPATVCKI PPGCNLKIFN NQEFAALLAQ SVNQGFEAVY QLTRMCTIRM SFVKGWGA EY RRQTVTSTPC WIELHLNGPL QWLDKVL TQM GSPSVRCSSM S |
| Applicable Applications for anti-SMAD2 antibody | ELISA, WB (Western Blot)                                                                                          |
| Cross Reactivity                                | Human, Mouse, Rat                                                                                                 |
| Immunogen                                       | A synthetic peptide corresponding to a sequence within amino acids 367-467 of human Smad2. (NP_005892.1).         |
| Preparation and Storage                         | Store at -20 degree C. Avoid freeze/thaw cycles.                                                                  |

### IMAGES



#### WB (Western Blot)

Western blot analysis of lysates from wild type (WT) and SMAD2 knockout (KO) HeLa (KO) cells, using [KO Validated] Smad2 Rabbit mAb (AAA282980) at 1:500 dilution. Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution. Lysates/proteins: 25ug per lane. Blocking buffer: 3% nonfat dry milk in TBST. Detection: ECL Basic Kit (RM00020). Exposure time: 180s.



#### WB (Western Blot)

Western blot analysis of lysates from Mouse brain, using [KO Validated] Smad2 Rabbit mAb (AAA282980) at 1:500 dilution. Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution. Lysates/proteins: 25ug per lane. Blocking buffer: 3% nonfat dry milk in TBST. Detection: ECL Basic Kit (RM00020). Exposure time: 180s.

ADDITIONAL INFORMATION

|                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|-----------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Related Product Information for anti-SMAD2 antibody | 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. |
| Product Categories/Family for anti-SMAD2 antibody   | Epigenetics Nuclear Signaling; Transcription Factors; Protein phosphorylation; Cancer; Signal Transduction; Cell Biology Developmental Biology; Growth factors; TGF-b-Smad Signaling Pathway; ESC Pluripotency and Differentiation; Stem Cells; Cardiovascular;                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |

NCBI AND UNIPROT INFORMATION

|                            |                                                                                           |
|----------------------------|-------------------------------------------------------------------------------------------|
| NCBI GI #                  | 51173730                                                                                  |
| NCBI GeneID                | 4087                                                                                      |
| NCBI Accession #           | NP_001003652.1                                                                            |
| NCBI GenBank Nucleotide #  | NM_001003652.3                                                                            |
| UniProt Accession #        | Q15796                                                                                    |
| Molecular Weight           | Calculated MW: 52kDa<br>Observed MW: 60kDa                                                |
| UniProt Protein Name       | Mothers against decapentaplegic homolog 2                                                 |
| UniProt Gene Name          | SMAD2                                                                                     |
| UniProt Synonym Gene Names | MADH2; MADR2; MAD homolog 2; Mothers against DPP homolog 2; hMAD-2; SMAD 2; Smad2; hSMAD2 |
| UniProt Entry Name         | SMAD2_HUMAN                                                                               |

**For Research Use Only.** Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.