

SMAD2 antibody - N-terminal region
Rabbit Polyclonal Antibody
Catalog # AI11445**Specification**

SMAD2 antibody - N-terminal region - Product Information

| | |
|-------------------|--|
| Application | WB |
| Primary Accession | Q15796 |
| Other Accession | NM_005901 , NP_005892 |
| Reactivity | Human, Mouse, Rat, Rabbit, Zebrafish, Pig, Sheep, Horse, Bovine, Dog |
| Predicted | Human, Mouse, Rat, Rabbit, Zebrafish, Pig, Chicken, Bovine |
| Host | Rabbit |
| Clonality | Polyclonal |
| Calculated MW | 51kDa kDa |

SMAD2 antibody - N-terminal region - Additional Information**Gene ID** 4087**Alias Symbol** **JV18, MADH2, MADR2, JV18-1, hMAD-2, hSMAD2****Other Names**

Mothers against decapentaplegic homolog 2, MAD homolog 2, Mothers against DPP homolog 2, JV18-1, Mad-related protein 2, hMAD-2, SMAD family member 2, SMAD 2, Smad2, hSMAD2, SMAD2, MADH2, MADR2

Format

Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.

Reconstitution & Storage

Add 100 ul of distilled water. Final anti-SMAD2 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.

Precautions

SMAD2 antibody - N-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

SMAD2 antibody - N-terminal region - Protein Information**Name** SMAD2**Synonyms** MADH2, MADR2**Function**

Receptor-regulated SMAD (R-SMAD) that is an intracellular signal transducer and transcriptional modulator activated by TGF-beta (transforming growth factor) and activin type 1 receptor kinases.

Binds the TRE element in the promoter region of many genes that are regulated by TGF-beta and, on formation of the SMAD2/SMAD4 complex, activates transcription. Promotes TGFB1-mediated transcription of odontoblastic differentiation genes in dental papilla cells (By similarity). Positively regulates PDPK1 kinase activity by stimulating its dissociation from the 14-3-3 protein YWHAQ which acts as a negative regulator. May act as a tumor suppressor in colorectal carcinoma (PubMed:8752209).

Cellular Location

Cytoplasm. Nucleus. Note=Cytoplasmic and nuclear in the absence of TGF-beta. On TGF-beta stimulation, migrates to the nucleus when complexed with SMAD4 or with IPO7 (PubMed:21145499, PubMed:9865696). On dephosphorylation by phosphatase PPM1A, released from the SMAD2/SMAD4 complex, and exported out of the nucleus by interaction with RANBP1 (PubMed:16751101, PubMed:19289081). Localized mainly to the nucleus in the early stages of embryo development with expression becoming evident in the cytoplasm at the blastocyst and epiblast stages (By similarity). {ECO:0000250|UniProtKB:Q62432, ECO:0000269|PubMed:16751101, ECO:0000269|PubMed:19289081, ECO:0000269|PubMed:21145499, ECO:0000269|PubMed:9865696}

Tissue Location

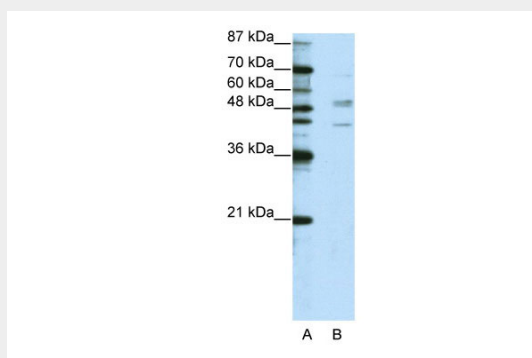
Expressed at high levels in skeletal muscle, endothelial cells, heart and placenta.

SMAD2 antibody - N-terminal region - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

SMAD2 antibody - N-terminal region - Images



WB Suggested Anti-SMAD2 Antibody Titration: 2.5µg/ml

ELISA Titer: 1:1562500

Positive Control: HepG2 cell lysate

SMAD2 antibody - N-terminal region - References

Zheng,X., (2006) EMBO J. 25 (3), 615-627
Reconstitution and Storage: For short term use, store at 2-8C up to 1 week. For long term storage, store at -20C in small aliquots to prevent freeze-thaw cycles.