

## Smad2 protein

<b>Catalog No :</b>	YD0090
<b>Reactivity :</b>	Human
<b>Applications :</b>	WB;SDS-PAGE
<b>Gene Name :</b>	SMAD2
<b>Protein Name :</b>	Smad2 protein
<b>Sequence :</b>	Amino acid: 19-254, with his-MBP tag.
<b>Human Gene Id :</b>	4087
<b>Human Swiss Prot No :</b>	Q15796
<b>Mouse Swiss Prot No :</b>	Q62432
<b>Formulation :</b>	Liquid in PBS
<b>Concentration :</b>	SDS-PAGE >90%
<b>Storage Stability :</b>	-20 °C/6 month,-80 °C for long storage
<b>Function :</b>	embryonic axis specification, in utero embryonic development, formation of primary germ layer, mesoderm formation,peptide secretion, generation of a signal involved in cell-cell signaling, regionalization, transcription, regulation of transcription, DNA-dependent, regulation of transcription from RNA polymerase II promoter, RNA processing, protein complex assembly, protein amino acid phosphorylation, phosphorus metabolic process, phosphate metabolic process,cell surface receptor linked signal transduction, enzyme linked receptor protein signaling pathway, transmembrane receptor protein serine/threonine kinase signaling pathway, transforming growth factor beta receptor signaling pathway, SMAD protein complex assembly, intracellular signaling cascade, cell-cell signaling, zygotic determination of dorsal/ventral axis, gastrulation, pattern specification process, mesoderm development, heart
<b>Subcellular Location :</b>	Cytoplasm . Nucleus . Cytoplasmic and nuclear in the absence of TGF-beta. On TGF-beta stimulation, migrates to the nucleus when complexed with SMAD4

(PubMed:9865696, PubMed:21145499). 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).

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

## Products Images

