

SMAD2 (Human) Cell-Based ELISA Kit

Catalog # KA3249

Size 1 Kit

Specification

Product Description	SMAD2 (Human) Cell-Based ELISA Kit is an indirect enzyme-linked immunoassay for qualitative determination of SMAD2 expression in cultured cells.
Suitable Sample	Attached Cell, Loosely Attached Cell, Suspension Cell
Label	HRP-conjugated
Detection Method	Colorimetric
Assay Type	Qualitative
Reactivity	Human, Mouse, Rat
Regulation Status	For research use only (RUO)
Storage Instruction	Store the kit at 4°C.

Applications

- Qualitative

Gene Info — SMAD2

Entrez GeneID	4087
Gene Name	SMAD2
Gene Alias	JV18, JV18-1, MADH2, MADR2, MGC22139, MGC34440, hMAD-2, hSMAD2
Gene Description	SMAD family member 2
Omim ID	601366

Gene Ontology

[Hyperlink](#)

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](#)