

SMAD2/SMAD3 (Human) Cell-Based ELISA Kit

Catalog # KA5663

Size 1 Kit

Specification

Product Description	SMAD2/SMAD3 (Human) Cell-Based ELISA Kit is an indirect enzyme-linked immunoassay for qualitative determination of Smad2/3 expression in cultured cells.
Suitable Sample	Attached cell, loosely attached cell and suspension cell
Label	HRP-conjugated
Detection Method	Colorimetric
Assay Type	Qualitative
Reactivity	Human
Regulatory Status	For research use only (RUO)
Storage Instruction	Store at 4°C for six months.

Applications

- Qualitative

Gene Info — SMAD2

Entrez GeneID	4087
Protein Accession#	P84022; Q15796
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

Gene Info — SMAD3

Entrez GeneID	4088
Protein Accession#	P84022; Q15796
Gene Name	SMAD3
Gene Alias	DKFZp586N0721, DKFZp686J10186, HSPC193, HsT17436, JV15-2, MADH3, MGC60396
Gene Description	SMAD family member 3
Omim ID	603109
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 functions as a transcriptional modulator activated by transforming growth factor-beta and is thought to play a role in the regulation of carcinogenesis. [provided by RefSeq]
Other Designations	MAD, mothers against decapentaplegic homolog 3 SMA- and MAD-related protein 3 SMAD, mothers against DPP homolog 3 mad homolog JV15-2 mad protein homolog mothers against decapentaplegic homolog 3

Pathway

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

Disease

- [Adenocarcinoma](#)
- [Alzheimer disease](#)
- [Anemia](#)
- [Asthma](#)
- [Bacteremia](#)
- [Breast cancer](#)

- [Breast Neoplasms](#)
- [Cleft Lip](#)
- [Cleft Lip](#)
- [Cleft Palate](#)
- [Cleft Palate](#)
- [Colitis](#)
- [Colorectal Neoplasms](#)
- [Coronary Artery Disease](#)
- [Crohn Disease](#)
- [Diabetes Mellitus](#)
- [Diabetic Nephropathies](#)
- [Esophageal Neoplasms](#)
- [Genetic Predisposition to Disease](#)
- [Genetic Predisposition to Disease](#)
- [Graft vs Host Disease](#)
- [Head and Neck Neoplasms](#)
- [Hypersensitivity](#)
- [Hypertension](#)
- [Hypertension](#)
- [Inflammatory Bowel Diseases](#)
- [Keloid](#)
- [Kidney Failure](#)
- [Liver Cirrhosis](#)
- [Liver Cirrhosis](#)
- [Neoplasm Recurrence](#)
- [Neoplasms](#)

- [Obesity](#)
- [Obesity](#)
- [Occupational Diseases](#)
- [Osteoarthritis](#)
- [Osteoporosis](#)
- [Osteoporosis](#)
- [Ovarian cancer](#)
- [Ovarian Failure](#)
- [Ovarian Failure](#)
- [Ovarian Neoplasms](#)
- [Pancreatic cancer](#)
- [Pancreatic cancer](#)
- [Pancreatic Neoplasms](#)
- [Pancreatic Neoplasms](#)
- [Polycystic Ovary Syndrome](#)
- [Polycystic Ovary Syndrome](#)
- [Prostate cancer](#)
- [Prostatic Neoplasms](#)
- [Puberty](#)
- [Puberty](#)
- [Pulmonary Disease](#)
- [Thrombophilia](#)
- [Thrombophilia](#)
- [Tobacco Use Disorder](#)
- [Tobacco Use Disorder](#)