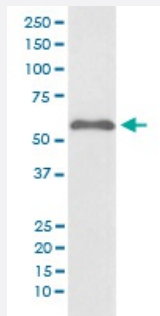


SMAD2 (phospho S255) monoclonal antibody, clone HBE-19

Catalog # MAB20573 Size 100 uL

Applications



Western Blot (Cell lysate)

Western Blot analysis of Hela cell treated with Okadaic acid and Calyculin A lysate using SMAD2 (phospho S255) monoclonal antibody, clone HBE-19.

Specification

Product Description	Rabbit monoclonal antibody raised against synthetic phosphopeptide of human SMAD2.
Immunogen	A synthetic phosphopeptide corresponding to residues surrounding S255 of human SMAD2.
Host	Rabbit
Reactivity	Human
Form	Liquid
Purification	Affinity purification
Isotype	IgG
Recommend Usage	Immunohistochemistry (1:50-1:200) Immunoprecipitation (1:50) Western Blot (1:1000-1:2000) The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS, 150 mM NaCl, pH 7.4 (50% glycerol, 0.4-0.5 mg/mL BSA, 0.02% sodium azide).
Storage Instruction	Store at -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

Note

This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Applications

- Western Blot (Cell lysate)

Western Blot analysis of HeLa cell treated with Okadaic acid and Calyculin A lysate using SMAD2 (phospho S255) monoclonal antibody, clone HBE-19.

- Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

- Immunoprecipitation

Gene Info — SMAD2

Entrez GeneID	4087
---------------	----------------------

Protein Accession#	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 d
ecapentaplegic 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](#)