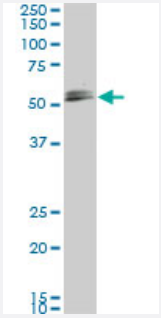
SMAD1 monoclonal antibody (M03), clone 2E9

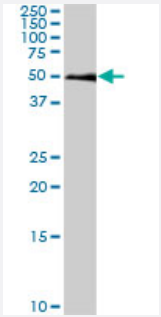
Catalog # H00004086-M03 Size 100 ug

Applications



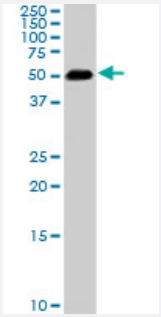
Western Blot (Cell lysate)

SMAD1 monoclonal antibody (M03), clone 2E9. Western Blot analysis of SMAD1 expression in IMR-32 (Cat # L008V1).



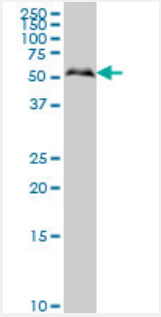
Western Blot (Cell lysate)

SMAD1 monoclonal antibody (M03), clone 2E9. Western Blot analysis of SMAD1 expression in Raw 264.7 (Cat # L024V1).



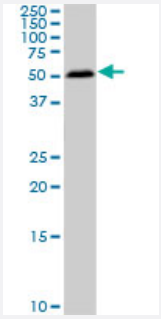
Western Blot (Cell lysate)

SMAD1 monoclonal antibody (M03), clone 2E9. Western Blot analysis of SMAD1 expression in PC-12 (Cat # L012V1).



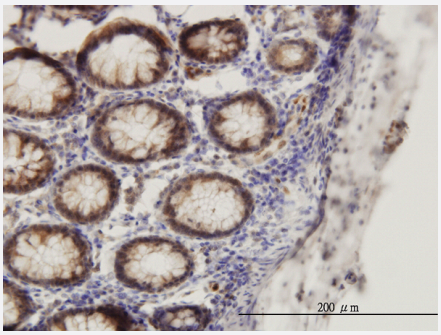
Western Blot (Cell lysate)

SMAD1 monoclonal antibody (M03), clone 2E9 Western Blot analysis of SMAD1 expression in HeLa (Cat # L013V1).



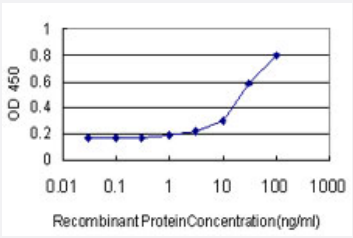
Western Blot (Cell lysate)

SMAD1 monoclonal antibody (M03), clone 2E9. Western Blot analysis of SMAD1 expression in NIH/3T3 (Cat # L018V1).



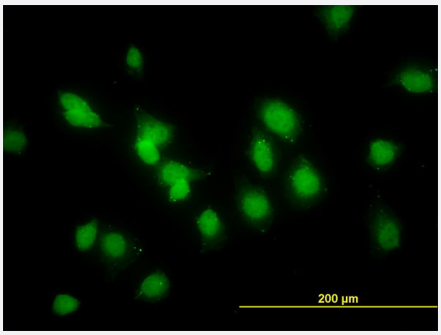
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunoperoxidase of monoclonal antibody to SMAD1 on formalin-fixed paraffin-embedded human colon. [antibody concentration 3 ug/ml]



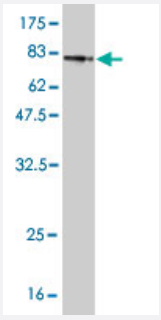
Sandwich ELISA (Recombinant protein)

Detection limit for recombinant GST tagged SMAD1 is approximately 1ng/ml as a capture antibody.



Immunofluorescence

Immunofluorescence of monoclonal antibody to SMAD1 on HeLa cell. [antibody concentration 10 ug/ml]



Western Blot detection against Immunogen (76.89 KDa) .

Specification

Product Description	Mouse monoclonal antibody raised against a full length recombinant SMAD1.
Immunogen	SMAD1 (AAH01878.1, 1 a.a. ~ 465 a.a) full-length recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Sequence	MNVTSLFSFTSPAVKRLLGWKQGDEEEKWAEKAVDALVKKLKKKKGAMEELEKALSCPGQPS NCVTIPRSLDGRLQVSHRKGLPHVIYCRVWRWPDLQSHHELKPLECCEFPFGSKQKEVCINPYHY KRVESPVLPPVLVPRHSEYNPQHSLLAQFRNLGQNEPHMPLNATFPDSFQQPNSHPFPHSPNS SYPNSPGSSSSTYPHSPTSSDPGSPFQMPADTPPPAYLPPEDPMTQDGSQPMDTNMMAPPLP SEINRGDVQAVAYEEPKHWCSIVYYELNNRVGEAFHASSTSVLVDGFTDPSNNKNRFCLGLLSNV NRNSTIENTRRHIGKGVHLYYVGGEVYAECLSDSSIFVQSRNCNYHHGFHPTTVCKIPSGCSLKIFN NQEFAQLLAQSVNHGFETVYELTKMCTIRMSFVKGWGAEYHRQDVTSTPCWIEIHLHGPLQWLDK VLTQMGSPHNPISSVS
Host	Mouse
Reactivity	Human, Mouse, Rat
Interspecies Antigen Sequence	Mouse (99)
Isotype	IgG1 Kappa
Quality Control Testing	Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (76.89 KDa) .
Storage Buffer	In 1x PBS, pH 7.4
Storage Instruction	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

Applications

- Western Blot (Cell lysate)

  SMAD1 monoclonal antibody (M03), clone 2E9. Western Blot analysis of SMAD1 expression in IMR-32 (Cat # L008V1).

  Protocol Download

- Western Blot (Cell lysate)

  SMAD1 monoclonal antibody (M03), clone 2E9. Western Blot analysis of SMAD1 expression in Raw 264.7 (Cat # L024V1).

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  SMAD1 monoclonal antibody (M03), clone 2E9. Western Blot analysis of SMAD1 expression in PC-12 (Cat # L012V1).

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- Western Blot (Cell lysate)

  SMAD1 monoclonal antibody (M03), clone 2E9 Western Blot analysis of SMAD1 expression in HeLa (Cat # L013V1).

  Protocol Download

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  SMAD1 monoclonal antibody (M03), clone 2E9. Western Blot analysis of SMAD1 expression in NIH/3T3 (Cat # L018V1).

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- Western Blot (Recombinant protein)

  Protocol Download

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

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  Protocol Download

- Sandwich ELISA (Recombinant protein)

  Detection limit for recombinant GST tagged SMAD1 is approximately 1ng/ml as a capture antibody.

  Protocol Download

- ELISA

- Immunofluorescence

  Immunofluorescence of monoclonal antibody to SMAD1 on HeLa cell. [antibody concentration 10 ug/ml]

Gene Info — SMAD1

Entrez GeneID	4086
GeneBank Accession#	BC001878
Protein Accession#	AAH01878.1

Gene Name	SMAD1
Gene Alias	BSP1, JV4-1, JV41, MADH1, MADR1
Gene Description	SMAD family member 1
Omim ID	601595
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 signals of the bone morphogenetic proteins (BMPs), which are involved in a range of biological activities including cell growth, apoptosis, morphogenesis, development and immune responses. In response to BMP ligands, this protein can be phosphorylated and activated by the BMP receptor kinase. The phosphorylated form of this protein forms a complex with SMAD4, which is important for its function in the transcription regulation. This protein is a target for SMAD-specific E3 ubiquitin ligases, such as SMURF1 and SMURF2, and undergoes ubiquitination and proteasome-mediated degradation. Alternatively spliced transcript variants encoding the same protein have been observed. [provided by RefSeq
Other Designations	MAD, mothers against decapentaplegic homolog 1|Mad-related protein 1|SMAD, mothers against DPP homolog 1|Sma- and Mad-related protein 1|TGF-beta signaling protein 1|mothers against DPP homolog 1|transforming growth factor-beta signaling protein 1

Publication Reference

- Temporal and regional patterns of Smad activation in the rat hippocampus following global ischemia.

  Nakajima T, Yanagihara M, Nishii H.

  Journal of the Neurological Sciences 2014 Feb; 337(1-2):25.

  Application: IHC, WB-Ce, WB-Ti, Human, Mouse, Hippocampal, HeLa cells

Pathway

- TGF-beta signaling pathway

Disease

- Cleft Lip
- Cleft Palate

- Diabetes Mellitus
- Diabetic Nephropathies
- Genetic Predisposition to Disease
- Head and Neck Neoplasms
- Hemochromatosis
- Hypertension
- Kidney Failure
- Neoplasm Recurrence
- Neoplasms
- Obesity
- Ovarian Failure
- Polycystic Ovary Syndrome
- Puberty
- Thrombophilia
- Tobacco Use Disorder