

Anti-Smad1 Mouse mAb

Purified Recombinant Mouse Monoclonal Antibody

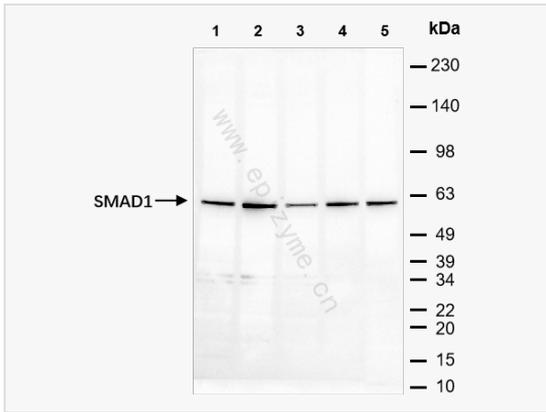
Catalog # M014704

Product Information

Application	IF (Cell)/ICC, ELISA, WB, IHC-P/IF (Tissue-P)
Reactivity	Human, Mouse (Cell)
Dilution	WB 1:1,000~1:2,000; IHC-P 1:100~1:200; IF 1:100~1:200
Host	Mouse
Clonality	Monoclonal
Clone No.	99F01C15
Isotype	IgG
Label	Unconjugated
Immunogen	Recombinant protein of human Smad1
Format	Affinity purified monoclonal antibody supplied in PBS with 0.01% sodium azide and 50% glycerol, pH 7.3.
Storage	Shipped on wet ice. Store at -20°C. Stable for 24 months from date of receipt. Aliquoting is unnecessary for -20°C storage.
Precautions	Anti-Smad1 Mouse mAb [99F01C15] is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Synonyms	BSP-1, BSP1, HsMAD1, JV4-1, JV41, MAD homolog 1, MAD mothers against decapentaplegic homolog 1, Mad related protein 1, Mad-related protein 1, MADH1, MADR1, Mothers against decapentaplegic homolog 1, Mothers against DPP homolog 1, SMA- AND MAD-RELATED PROTEIN 1, SMAD 1, SMAD family member 1, SMAD mothers against DPP homolog 1, Smad1, SMAD1_HUMAN, TGF beta signaling protein 1, Transforming growth factor-beta-signaling protein 1.
Calculated MW	Calculated MW: 52 kDa; Observed MW: 60 kDa
Uniprot ID	Q15797
Gene ID	4086
Background	Transcriptional modulator activated by BMP (bone morphogenetic proteins) type 1 receptor kinase. SMAD1 is a receptor-regulated SMAD (R-SMAD). SMAD1/OAZ1/PSMB4 complex mediates the degradation of the CREBBP/EP300 repressor SNIP1. May act synergistically with SMAD4 and YY1 in bone morphogenetic protein (BMP)- mediated cardiac-specific gene expression.
Cellular Location	Cytoplasm. Nucleus. Cytoplasmic in the absence of ligand. Migrates to the nucleus when complexed with SMAD4. Co-localizes with LEMD3 at the nucleus inner membrane.
Tissue Location	Ubiquitous. Highest expression seen in the heart and skeletal muscle.



Western Blot - Anti-Smad1 Mouse mAb [99F01C15]

All lanes: M014704 at 1:2,000 dilution

Lane 1: HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysates

Lane 2: HepG2 (Human hepatocarcinoma epithelial cell) whole cell lysates

Lane 3: HCT116 (Human colorectal carcinoma epithelial cell) whole cell lysates

Lane 4: A431 (Human epidermoid teratoma cell line) whole cell lysates

Lane 5: Raw264.7 (Mouse mononuclear macrophage leukemia cell) whole cell lysates

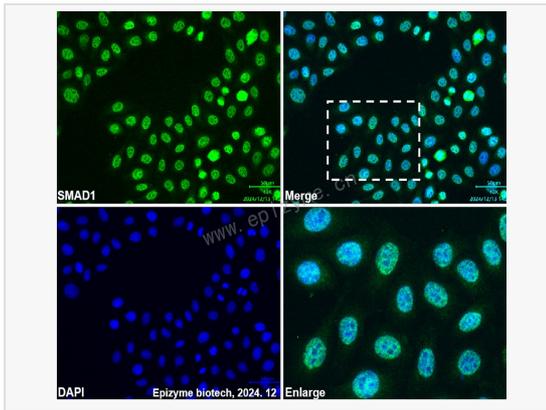
Lysates/proteins at 10 µg per lane.

Secondary antibody: Goat Anti-Mouse IgG (H+L), HRP Conjugated (Cat. No. LF101) at 1:5,000 dilution

Predicted band size: 52 kDa

Observed band size: 60 kDa

Developed using the ECL technique (Cat. No. SQ201).



Immunofluorescence - Anti-Smad1 Mouse mAb [99F01C15]

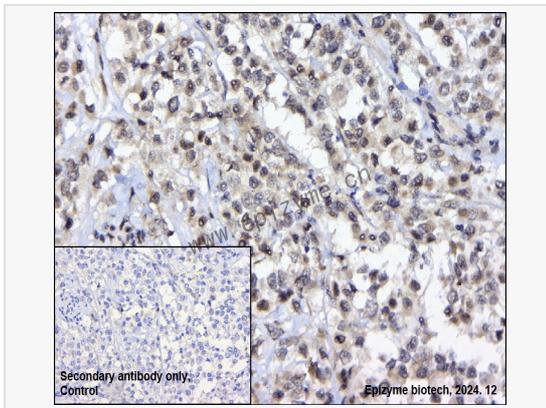
Sample: HeLa cells

The cells were fixed with 4% paraformaldehyde (10 min), permeabilized with 0.5% Triton X-100 for 10 minutes and then blocked with 5% BSA in 0.1% PBS-Tween for 0.5 hours.

Primary antibody: M014704 at 1:100 dilution

Secondary antibody: Goat anti-Mouse (488) at 1:1,000 dilution (shown in green)

Nuclei were stained with DAPI (shown in blue).



Immunohistochemistry - Anti-Smad1 Mouse mAb [99F01C15]

Sample: Paraformaldehyde-fixed, paraffin embedded human breast cancer tissue

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 30 mins.

Primary antibody: M014704 at 1:200 dilution

Secondary antibody: Goat Anti-Mouse IgG (H+L), HRP conjugated at 1:1,000 dilution
DAB was used as the chromogen.

Counter stained with hematoxylin.

Positive/negative staining were presented.

Only the secondary antibody was used as the negative control.