

Anti-phospho-Smad2/3(Thr8) Mouse mAb

Purified Recombinant Mouse Monoclonal Antibody

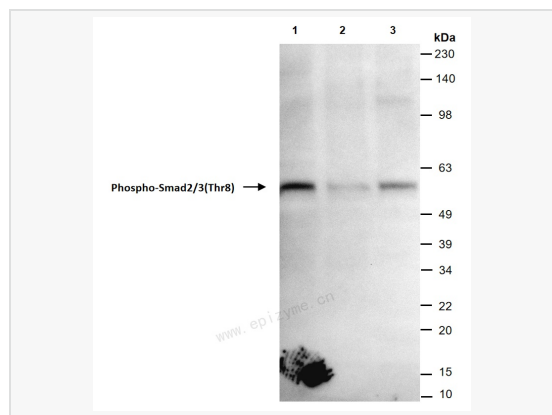
Catalog # M900053

Product Information

Application	WB, IHC-P/IF (Tissue-P), IF (Cell)/ICC, ELISA
Reactivity	Human, Rat
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.	61A83P70
Isotype	IgG
Label	Unconjugated
Immunogen	A synthetic phosphopeptide corresponding to residues surrounding Thr8 of human Smad2
Format	Affinity purified monoclonal antibody supplied in PBS with 0.02% 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-phospho-Smad2/3(Thr8) Mouse mAb [61A83P70] is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Synonyms	hMAD 2; hMAD 3; hSMAD2; hSMAD3; Mad related protein 2; MADH2; MADH3; MADR2; Mothers against DPP homolog 2; Mothers against DPP homolog 3; Sma and Mad related protein 2; SMA and MAD related protein 3; SMAD 2; SMAD 3; SMAD family member 2; SMAD family member 3; smad2+3; smad2/3.
Calculated MW	Calculated MW: 52 kDa; Observed MW: 52 kDa
Uniprot ID	Q15796
Gene ID	4087
Background	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 have been observed for this gene. [provided by RefSeq, May 2012]



Western Blot - Anti-phospho-Smad2/3(Thr8) Mouse mAb [61A83P70]

All lanes: M900053 at 1:1,000 dilution

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

Lane 2: 293T (Human embryonic kidney cell) whole cell lysates

Lane 3: PC-12 (Rat adrenal pheochromocytoma epithelial cell) whole cell lysates

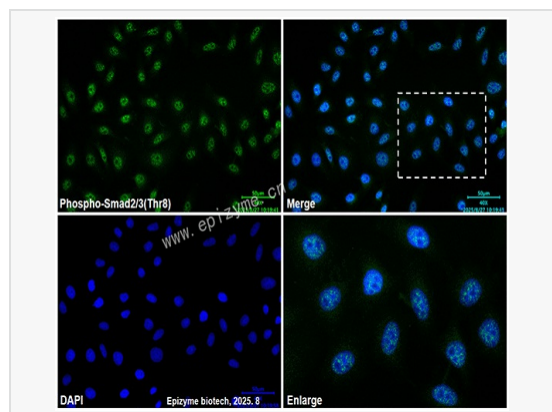
Lysates/proteins at 10 µg per lane.

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: 52 kDa

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



Immunofluorescence - Anti-phospho-Smad2/3(Thr8) Mouse mAb [61A83P70]

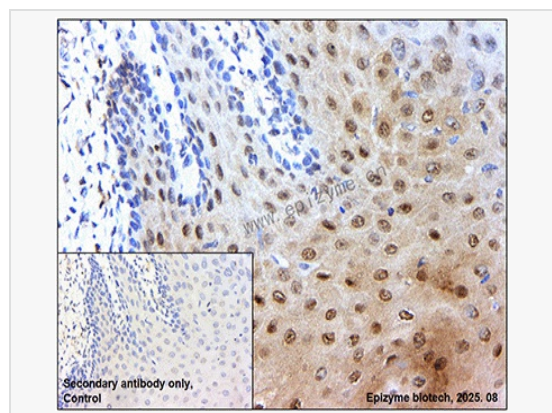
Sample: HeLa cells

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

Primary antibody: M900053 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-phospho-Smad2/3(Thr8) Mouse mAb [61A83P70]

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

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

Primary antibody: M900053 at 1:100 dilution

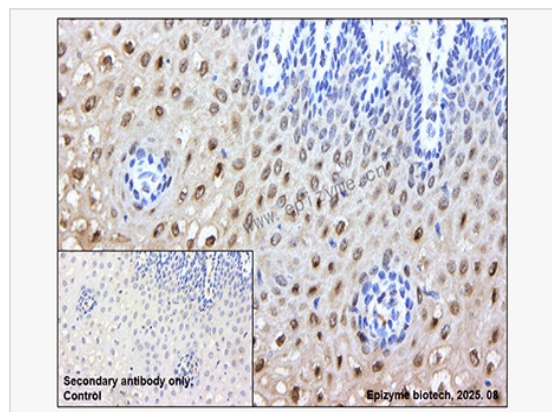
Secondary antibody: Goat Anti-Mouse IgG (H+L), HRP conjugated at 1:1,000 dilution

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.



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

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

Primary antibody: M900053 at 1:100 dilution

Secondary antibody: Goat Anti-Mouse IgG (H+L), HRP conjugated at 1:1,000 dilution

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