Anti-Phospho-Smad2/3 (Thr8) Rabbit mAb

Purified Recombinant Rabbit Monoclonal Antibody

Catalog # R014600

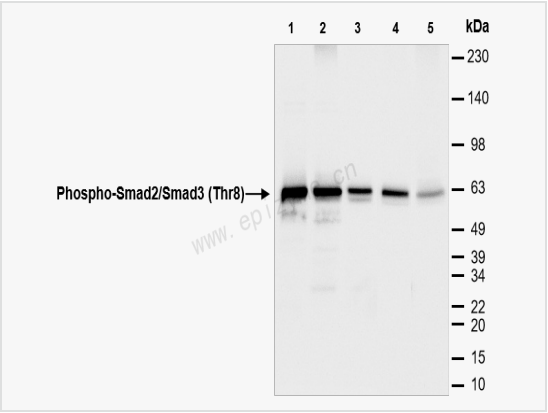
Product Information

Application	WB, IF (Cell)/ICC, ELISA
Reactivity	Human, Mouse, Rat
Dilution	WB 1:1,000~1:2,000; IF 1:100~1:200
Host	Rabbit
Clonality	Monoclonal
Clone No.	31J01M70
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 0.01% 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-Phospho-Smad2/3 (Thr8) Rabbit mAb [31J01M70] is for research use only and not for use in diagnostic or therapeutic procedures.

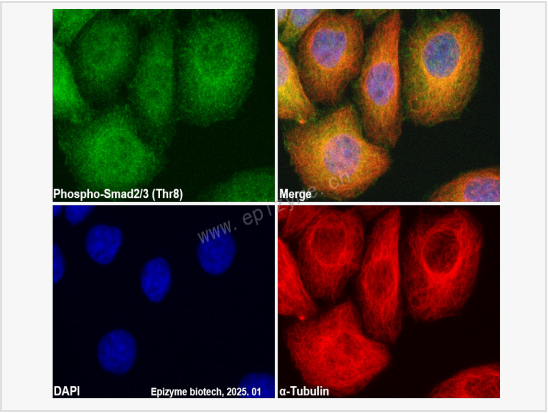
Protein Information

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: 58,62 kDa
Uniprot ID	Q15796, P84022
Gene ID	4087, 4088
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]

Validation Images



Western Blot - Anti-Phospho-Smad2/3 (Thr8) Rabbit mAb [31J01M70]
All lanes: R014600 at 1:1,000 dilution
Lane 1: HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysates
Lane 2: T24 (Human bladder cancer epithelial cell) whole cell lysates
Lane 3: C2C12 (Mouse myoblasts epithelial cell) whole cell lysates
Lane 4: Rat heart whole tissue lysates
Lane 5: Mouse muscle whole tissue lysates
Lysates/proteins at 10 µg per lane.
Secondary antibody: Goat Anti-Rabbit IgG (H+L), HRP Conjugated (Cat. No. LF102) at 1:5,000 dilution
Predicted band size: 52 kDa
Observed band size: 58,62 kDa
Developed using the ECL technique (Cat. No. SQ201).



Immunofluorescence - Anti-Phospho-Smad2/3 (Thr8) Rabbit mAb [31J01M70]
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 antibodies: R014600 at 1:100 dilution and α-tubulin Mouse Monoclonal Antibody (Cat. No. LF209) at 1:100 dilution
Secondary antibodies: Goat anti-Rabbit (488) at 1:1,000 dilution (shown in green) and Goat anti-Mouse (555) at 1:1,000 dilution (shown in red)
Nuclei were stained with DAPI (shown in blue).