

Anti-Smad4 Rabbit mAb

Purified Recombinant Rabbit Monoclonal Antibody

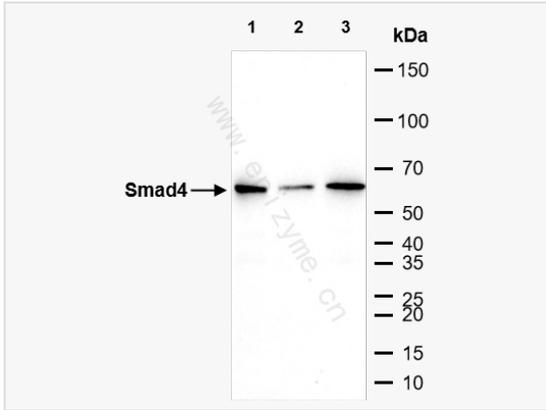
Catalog # R013947

Product Information

Application	ELISA, WB, IHC-P/IF (Tissue-P), IF (Cell)/ICC
Reactivity	Rat, Mouse, Human
Dilution	WB 1:1,000~1:2,000; IHC-P 1:200; IF 1:100
Host	Rabbit
Clonality	Monoclonal
Clone No.	70G40K17
Isotype	IgG
Label	Unconjugated
Immunogen	A synthesized peptide derived from human Smad4
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-Smad4 Rabbit mAb [70G40K17] is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Synonyms	MAD homolog 4, MAD, MADH4, Mothers against decapentaplegic homolog 4, DPC4, hSMAD4, JIP, (Small) Mothers Against Decapentaplegic, Deleted in Pancreatic Carcinoma, Deleted in pancreatic carcinoma locus 4, Deletion target in pancreatic carcinoma 4, MAD mothers against decapentaplegic Drosophila homolog 4, MAD mothers against decapentaplegic homolog 4, Medea, Mothers against DPP homolog 4, OTTHUMP00000163548, SMAD family member 4, SMAD mothers against DPP homolog 4.
Calculated MW	Calculated MW: 65 kDa; Observed MW: 65 kDa
Uniprot ID	Q13485
Gene ID	4089
Background	Smad4 transcription factor that mediates signal transduction by the transforming growth factor superfamily. The common smad (co-smad). Binds directly to consensus DNA-binding elements in the promoters of target genes. Promotes binding of the Smad2/Smad4/Fast-1 complex to DNA and provides an activation function required for Smad1 or Smad2 to stimulate transcription.
Cellular Location	Cytoplasm. Nucleus. Note=Cytoplasmic in the absence of ligand. Migrates to the nucleus when complexed with R-SMAD. PDPK1 prevents its nuclear translocation in response to TGF-beta.



Western Blot - Anti-Smad4 Rabbit mAb [70G40K17]

All lanes: R013947 at 1:1,000 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

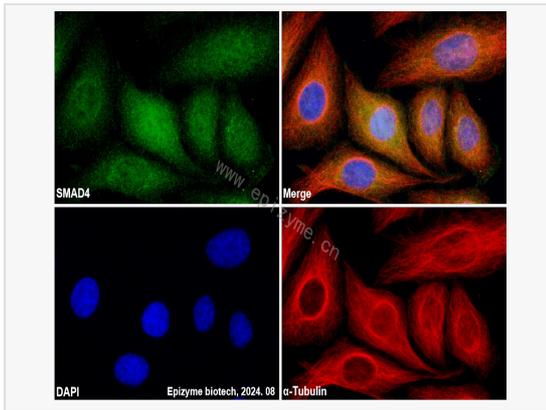
Lysates/proteins at 10 μ g per lane.

Secondary antibody: Goat Anti-Rabbit IgG(H+L), HRP Conjugated (Cat. No. LF102) at 1:5,000 dilution

Predicted band size: 65 kDa

Observed band size: 65 kDa

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



Immunofluorescence - Anti-Smad4 Rabbit mAb [70G40K17]

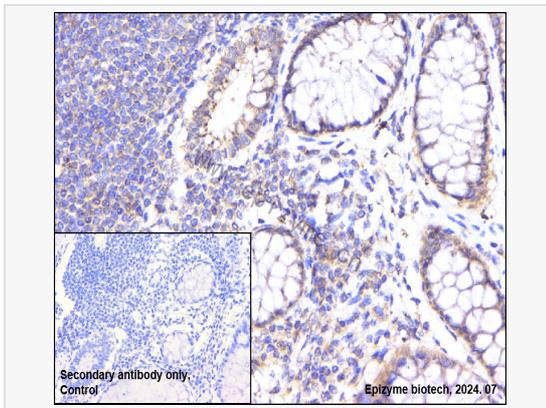
Sample: HeLa cells

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: R013947 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).



Immunohistochemistry - Anti-Smad4 Rabbit mAb [70G40K17]

Sample: Paraformaldehyde-fixed, paraffin embedded human colorectal carcinoma tissue

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

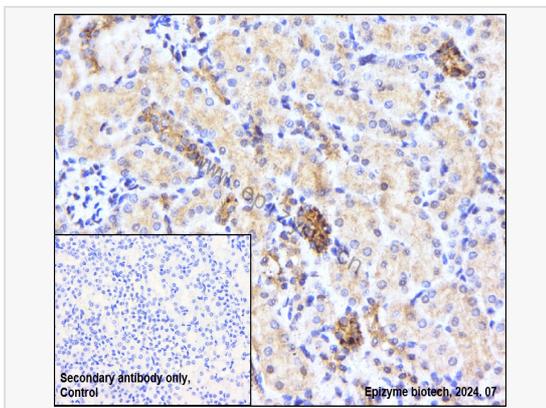
Primary antibody: R013947 at 1:200 dilution

Secondary antibody: Goat Anti-Rabbit 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.



Immunohistochemistry - Anti-Smad4 Rabbit mAb [70G40K17]

Sample: Paraformaldehyde-fixed, paraffin embedded mouse kidney tissue

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

Primary antibody: R013947 at 1:200 dilution

Secondary antibody: Goat Anti-Rabbit 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.