

[KD Validated] Anti-SMAD4 Rabbit mAb

Purified Recombinant Rabbit Monoclonal Antibody

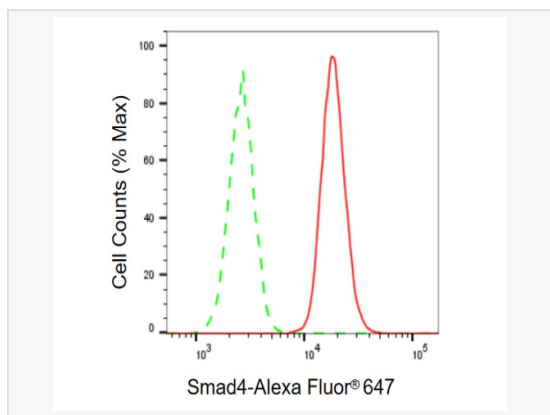
Catalog # R020324

Product Information

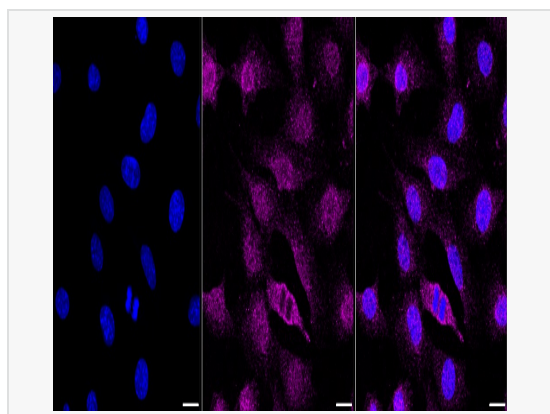
Application	WB, FC, IF (Cell)/ICC, IHC-P/IF (Tissue-P)
Reactivity	Human, Mouse, Rat
Dilution	WB 1:1,000~1:5,000; FC 1:200~1:2,000; IF 1:100~1:1,000; IHC-P 1:100~1:200
Host	Rabbit
Clonality	Monoclonal
Clone No.	40F67E78
Isotype	IgG
Label	Unconjugated
Immunogen	A synthesized peptide derived from human Smad4
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 12 months from date of receipt. Aliquoting is unnecessary for -20°C storage.
Precautions	[KD Validated] Anti-SMAD4 Rabbit mAb [40F67E78] is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

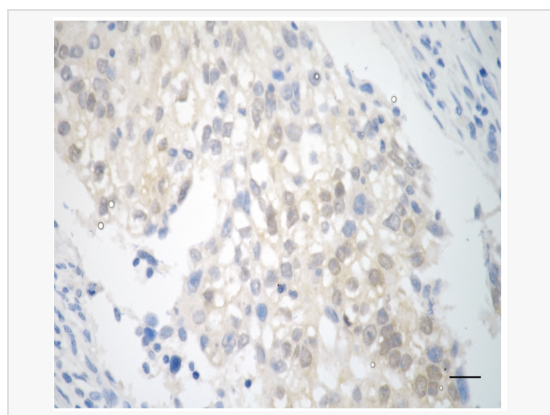
Synonyms	DPC4; MADH4; Mothers Against Decapentaplegic Homolog 4; Deletion Target In Pancreatic Carcinoma 4; MAD Homolog 4; MAD, Mothers Against Decapentaplegic Homolog 4 (Drosophila); Mothers Against Decapentaplegic, Drosophila, Homolog Of, 4; SMAD, Mothers Against DPP Homolog 4 (Drosophila); Deleted In Pancreatic Carcinoma Locus 4; SMAD, Mothers Against DPP Homolog 4; Mothers Against DPP Homolog 4; SMAD 4; HSMAD4; MYHRS; Smad4; JIP.
Calculated MW	Calculated MW: 60 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.



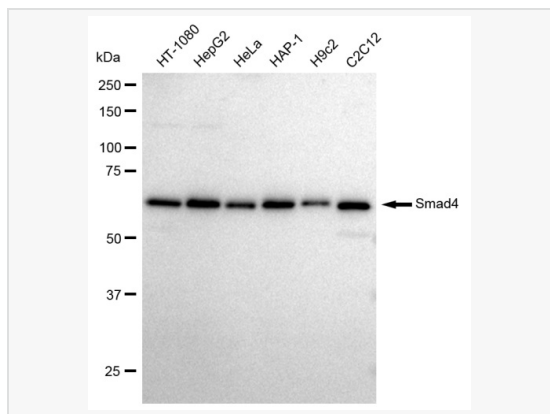
Flow cytometric analysis of Smad4 expression in C2C12 cells using Smad4 antibody (R020324, 1:2,000). Green, isotype control; red, Smad4.



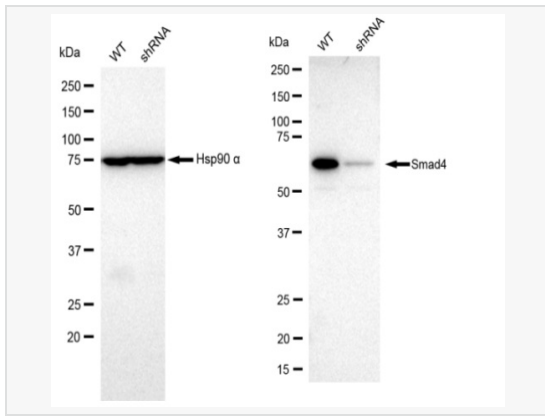
Immunocytochemical staining of C2C12 cells with Smad4 antibody (R020324, 1:1,000). Nuclei were stained blue with DAPI; Smad4 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar: 20 µm.



Immunohistochemistry was performed on paraffin-embedded human breast carcinoma using smad4 antibody (R020324, 1:200). Antigen retrieval was done in sodium citrate buffer (pH 6.0). DAB was used for detection, with hematoxylin counterstaining. Images were acquired using a Nikon Ci-L Plus microscope (40× objective). Scale bar: 25 µm.



Western blotting analysis using Smad4 antibody (R020324). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with Smad4 antibody (R020324, 1:5,000) and HRP-conjugated goat anti rabbit secondary antibody (1:50,000) respectively. Image was developed using ECL Substrate Kit.



Western blotting analysis using Smad4 antibody (R020324). Smad4 expression in wild type (WT) and Smad4 shRNA knockdown (KD) HT-1080 cells with 30 μ g of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with Smad4 antibody (R020324, 1:5,000) and HRP-conjugated goat anti rabbit secondary antibody (1:50,000) respectively. Image was developed using ECL Substrate Kit.