Anti-Smad2 Antibody [C9-B0]

EM1701-44

Product Type:	Mouse monoclonal IgG1, primary antibodies
Species reactivity:	Human, Mouse, Rat
Applications:	WB, IHC-P, IF-Cell
Molecular Wt:	58 kDa
Clone number:	C9-B0

Description: Smad proteins, the mammalian homologs of the Drosophila mothers against decapentaplegic (Mad), have been implicated as downstream effectors of TGFβ/BMP signaling. Smad1 (also designated Madr1 or JV4-1) and Smad5 are effectors of BMP-2 and BMP-4 function, while Smad2 (also designated Madr2 or JV18-1) and Smad3 are involved in TGFβ and Activin-mediated growth modulation. Smad4 (also designated DPC4) has been shown to mediate all of the above activities through interaction with various Smad family members. Smad6 and Smad7 regulate the response to Activin/TGFβ signaling by interfering with TGFβ-mediated phosphorylation of other Smad proteins.

Immunogen: Recombinant protein within Human Smad2 aa 151-450 / 467.

Positive control: Hela, A549, HUVEC, rat testis tissue, human tonsil tissue, human liver cancer tissue, mouse brain tissue.

Subcellular location: Cytoplasm. Nucleus.

Database links: SwissProt: Q15796 Human | Q62432 Mouse | O70436 Rat

Recommended Dilutions:

WB	1:500
IF-Cell	1:50-1:200
IHC-P	1:50-1:200

Storage Buffer: 1*PBS (pH7.4), 0.2% BSA, 50% Glycerol. Preservative: 0.05% Sodium Azide.

Storage Instruction: Store at +4℃ after thawing. Aliquot store at -20℃ or -80℃. Avoid repeated freeze / thaw cycles.

Purity: Protein G affinity purified.

Images

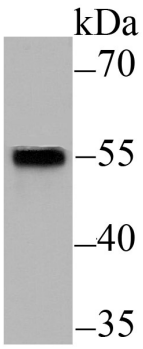

Fig1: Western blot analysis of Smad2 on Hela cell lysate using anti-Smad2 antibody at 1/500 dilution.

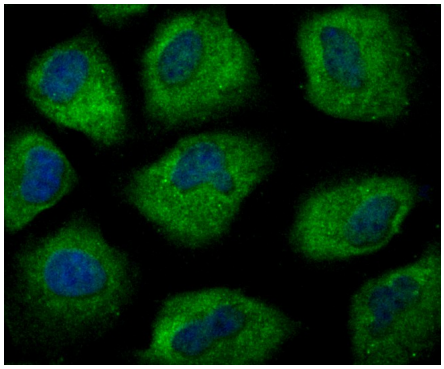

Fig2: ICC staining Smad2 (green) in HUVEC cells. The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.

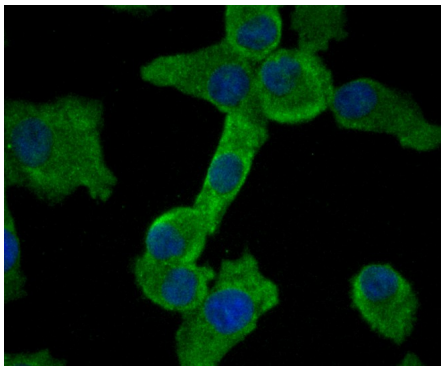

Fig3: ICC staining Smad2 (green) in A549 cells. The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.

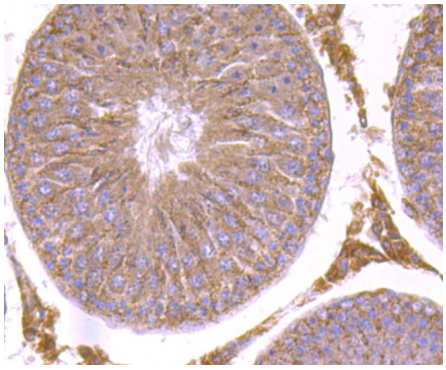

Fig4: ICC staining Smad2 (green) in Hela cells. The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.

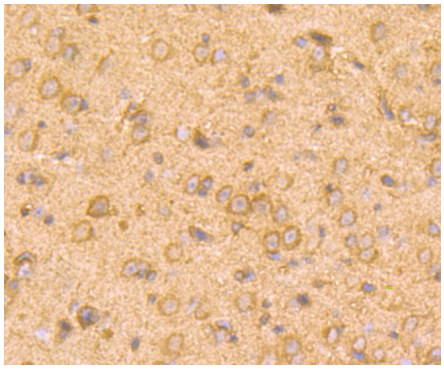

Fig5: Immunohistochemical analysis of paraffin-embedded mouse brain tissue using anti-Smad2 antibody. Counter stained with hematoxylin.

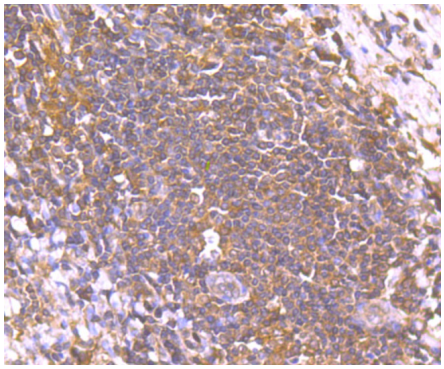

Fig6: Immunohistochemical analysis of paraffin-embedded human tonsil tissue using anti-Smad2 antibody. Counter stained with hematoxylin.

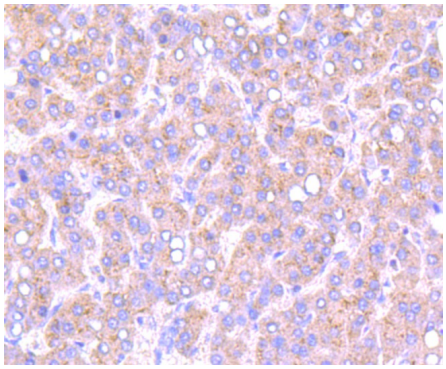

Fig7: Immunohistochemical analysis of paraffin-embedded human liver cancer tissue using anti-Smad2 antibody. Counter stained with hematoxylin.

Background References

1. Lebrun J J et al. Roles of pathway-specific and inhibitory Smads in activin receptor signaling. Mol Endocrinol 13:15-23 (1999).
2. Lin X et al. PPM1A functions as a Smad phosphatase to terminate TGFbeta signaling. Cell 125:915-928 (2006).