Anti-BMP2 Antibody

ER80602

Product Type:	Rabbit polyclonal IgG, primary antibodies
Species reactivity:	Human, Mouse, Rat
Applications:	WB, IF-Cell, IHC-P, FC
Molecular Wt:	Predicted band size: 45 kDa

Description: BMP-2 belongs to the TGF-β superfamily of proteins. BMP-2 plays an important role in the development of bone and cartilage. It is involved in the hedgehog pathway, TGF beta signaling pathway, and in cytokine-cytokine receptor interaction. It is involved also in cardiac cell differentiation and epithelial to mesenchymal transition. Implantation of BMP-2 in a collagen sponge induces new bone formation and can be used for the treatment of bony defects, delayed union, and non-union.

Immunogen: Synthetic peptide within human BMP2 aa 51-100.

Positive control: Caco-2 cell lysate, C2C12 cell lysate, Hela, MCF-7, rat small intestine tissue, human breast cancer tissue, mouse small intestine tissue.

Subcellular location: Secreted.

Database links: SwissProt: P12643 Human | P21274 Mouse | P49001 Rat

Recommended Dilutions:

WB	1:1,000
IF-Cell	1:200
IHC-P	1:200
FC	1:100-1:200

Storage Buffer: 1*PBS (pH7.4), 0.2% BSA, 40% Glycerol. Preservative: 0.05% Sodium Azide.

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

Purity: Immunogen affinity purified.

Images

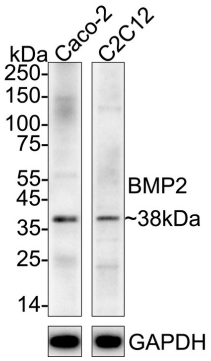

Fig1: Western blot analysis of BMP2 on different lysates with Rabbit anti-BMP2 antibody (ER80602) at 1/1,000 dilution.

Lane 1: Caco-2 cell lysate
Lane 2: C2C12 cell lysate

Predicted band size: 45 kDa
Observed band size: 38 kDa

Exposure time: 3 minutes; ECL: K1801;

4-20% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDM/TBST for 1 hour at room temperature. The primary antibody (ER80602) at 1/1,000 dilution was used in 5% NFDM/TBST at 4℃ overnight. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1/50,000 dilution was used for 1 hour at room temperature.

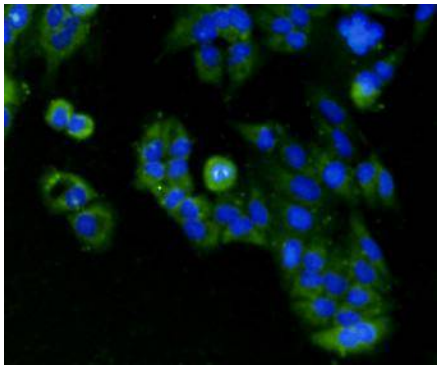

Fig2: ICC staining BMP2 in Hela cells (green). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS. DAPI was used to stain the cell nuclei (blue).

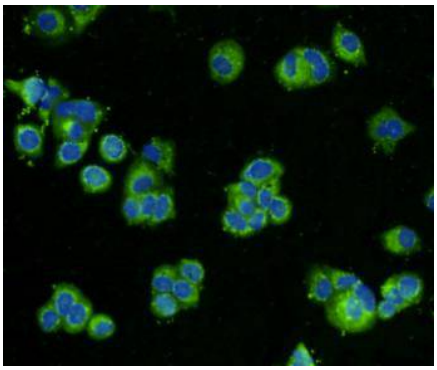

Fig3: ICC staining BMP2 in MCF-7 cells (green). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS. DAPI was used to stain the cell nuclei (blue).

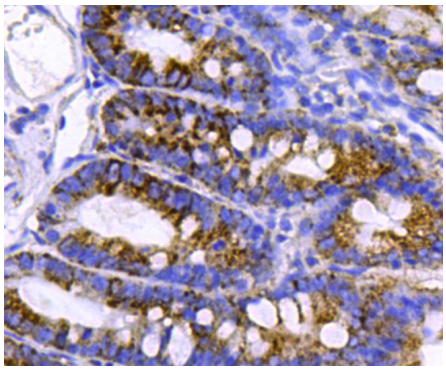

Fig4: Immunohistochemical analysis of paraffin-embedded rat small intestine tissue using anti-BMP2 antibody. Counter stained with hematoxylin.

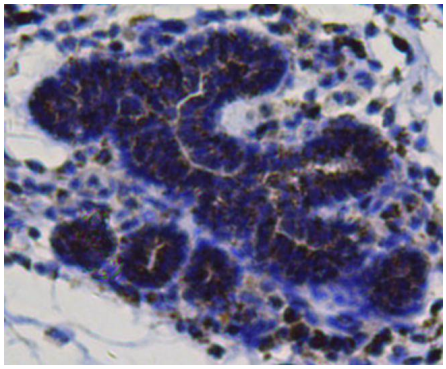

Fig5: Immunohistochemical analysis of paraffin-embedded human breast cancer tissue using anti-BMP2 antibody. Counter stained with hematoxylin.

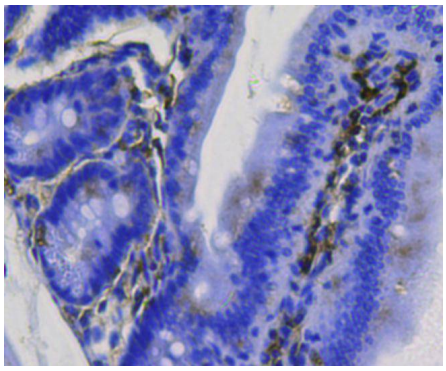

Fig6: Immunohistochemical analysis of paraffin-embedded mouse small intestine tissue using anti-BMP2 antibody. Counter stained with hematoxylin.

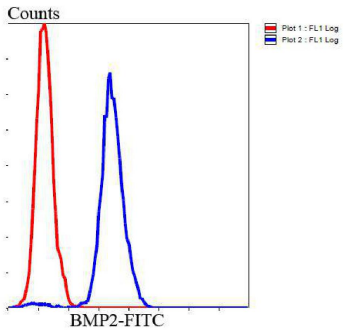

Fig7: Flow cytometric analysis of Hela cells with BMP2 antibody at 1/100 dilution (blue) compared with an unlabelled control (cells without incubation with primary antibody; red). Goat anti rabbit IgG (FITC) was used as the secondary antibody.

Background References

1. Li, K.L., et al. 2012. p53 negatively regulates the osteogenic differentiation of vascular smooth muscle cells in mice with chronic kidney disease. Cardiovasc. J. Afr. 23: e1-e9.
2. Adas, G., et al. 2011. Mesenchymal stem cells improve the healing of ischemic colonic anastomoses (experimental study). Langenbecks Arch. Surg. 396: 115-126.