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Anti-BMP3 Antibody

Catalog # AP59486

Product Information

Application	WB, IHC, IF/IC
Primary Accession	P12645
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	53372

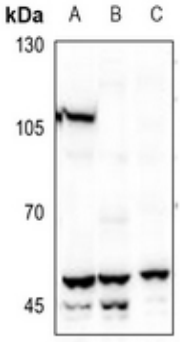
Additional Information

Gene ID	651
Other Names	BMP3A; Bone morphogenetic protein 3; BMP-3; Bone morphogenetic protein 3A; BMP-3A; Osteogenin
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human BMP3. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000), IHC (1/100 - 1/200) IHC~~WB (1/500 - 1/1000), IHC (1/100 - 1/200) IF/IC~~N/A
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

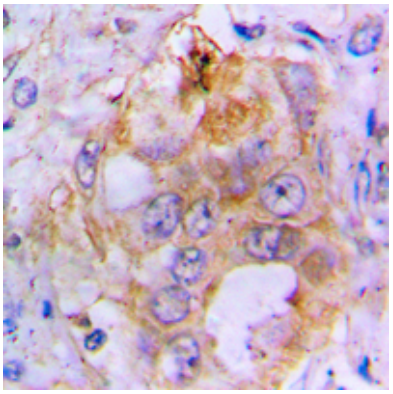
Protein Information

Name	BMP3
Synonyms	BMP3A
Function	Growth factor of the TGF-beta superfamily that plays an essential role in developmental process by inducing and patterning early skeletal formation and by negatively regulating bone density. Antagonizes the ability of certain osteogenic BMPs to induce osteoprogenitor differentiation and ossification (PubMed:11138004, PubMed:15269709). Initiates signaling cascades by associating with type II receptor ACVR2B to activate SMAD2-dependent and SMAD-independent signaling cascades including TAK1 and JNK pathways (PubMed:31665064).
Cellular Location	Secreted.
Tissue Location	Expressed in adult and fetal cartilage.

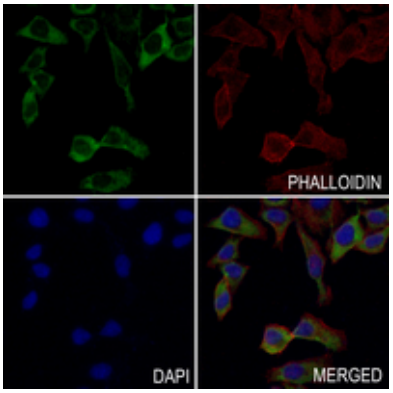
Images



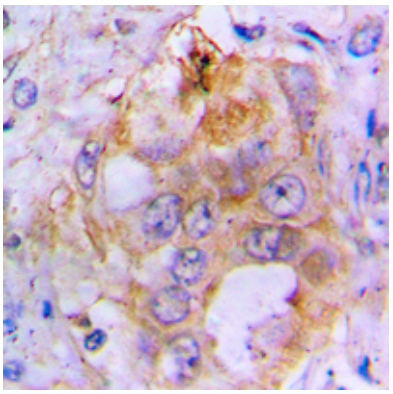
Western blot analysis of BMP3 expression in A549 (A), H446 (B), U2OS (C), mouse lung (D) whole cell lysates. (Predicted band size: 53 kD; Observed band size: 53 kD)



Immunohistochemical analysis of BMP3 staining in human lung cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of BMP3 staining in HepG2 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with a AF488-conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AF594 was used to stain Actin filaments (red). DAPI was used to stain the cell nuclei (blue).



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Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.