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Anti-BMP6 Antibody

Catalog # AP60434

Product Information

Application	WB, IHC, IF/IC
Primary Accession	P22004
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	57226

Additional Information

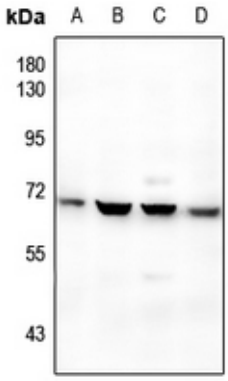
Gene ID	654
Other Names	VGR; Bone morphogenetic protein 6; BMP-6; VG-1-related protein; VG-1-R; VGR-1
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human BMP6. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000) IHC~~1:100~500 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

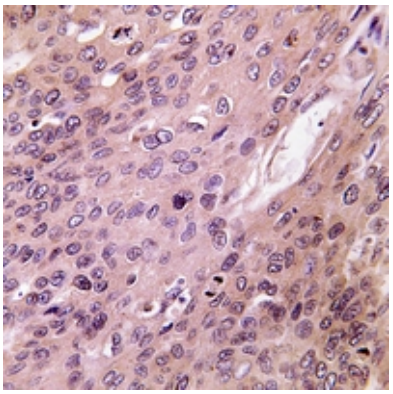
Name	BMP6
Synonyms	VGR
Function	Growth factor of the TGF-beta superfamily that plays essential roles in many developmental processes including cartilage and bone formation (PubMed:31019025). Also plays an important role in the regulation of HAMP/hepcidin expression and iron metabolism by acting as a ligand for hemojuvelin/HJV (PubMed:26582087). Also acts to promote expression of HAMP, potentially via the interaction with its receptor BMPR1A/ALK3 (PubMed:30097509, PubMed:31800957). Initiates the canonical BMP signaling cascade by associating with type I receptor ACVR1 and type II receptor ACVR2B (PubMed:18070108). In turn, ACVR1 propagates signal by phosphorylating SMAD1/5/8 that travel to the nucleus and act as activators and repressors of transcription of target. Can also signal through non-canonical pathway such as TAZ-Hippo signaling cascade to modulate VEGF signaling by regulating VEGFR2 expression (PubMed:33021694).

Cellular Location Secreted.

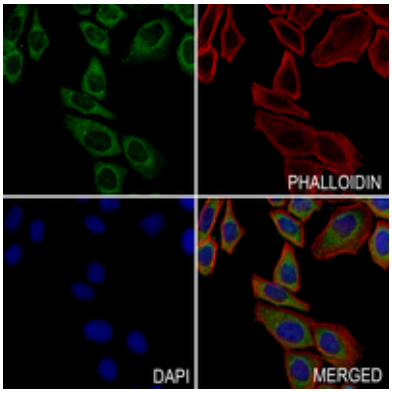
Images



Western blot analysis of BMP6 expression in PC12 (A), 3T3L1 (B), HuT78 (C), PC3 (D) whole cell lysates. (Predicted band size: 57 kD; Observed band size: 65 kD)



Immunohistochemical analysis of BMP6 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 BMP6 staining in MCF7 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).

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