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Anti-BMP-5 Antibody

Catalog # ABO12375

Product Information

Application	WB, IHC-P, E
Primary Accession	P22003
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Bone morphogenetic protein 5(BMP5) detection. Tested with WB, IHC-P, ELISA in Human;Mouse;Rat.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	653
Other Names	Bone morphogenetic protein 5, BMP-5, BMP5
Calculated MW	51737
Application Details	Immunohistochemistry(Paraffin-embedded Section), 0.5-1 □g/ml, Human, Mouse, Rat, By Heat ELISA , 0.1-0.5 □g/ml, Human, - Western blot, 0.1-0.5 □g/ml, Human, Mouse, Rat
Subcellular Localization	Secreted.
Tissue Specificity	Expressed in the lung and liver.
Source	Eukaryota
Protein Name	Bone morphogenetic protein 5
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human BMP-5 (332-365aa HQDSSRMSSVGDYNTSEQKQACKKHELYVSFRDL), different from the related mouse sequence by three amino acids.
Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins

Storage	At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing.

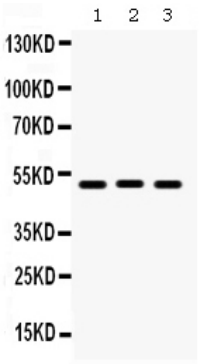
Protein Information

Name	BMP5
Function	Growth factor of the TGF-beta superfamily that plays essential roles in many developmental processes, including cartilage and bone formation or neurogenesis (PubMed:11580864, PubMed:29321139). Initiates the canonical BMP signaling cascade by associating with type I receptor BMPR1A and type II receptor BMPR2 (PubMed:11580864). In turn, BMPR1A propagates signal by phosphorylating SMAD1/5/8 that travel to the nucleus and act as activators and repressors of transcription of target genes (PubMed:11580864, PubMed:29321139). Can also signal through non-canonical pathway such as MAPK p38 signaling cascade to promote chondrogenic differentiation (PubMed:20402566). Promotes the expression of HAMP, this is repressed by its interaction with ERFE (PubMed:30097509).
Cellular Location	Secreted.
Tissue Location	Expressed in the lung and liver.

Background

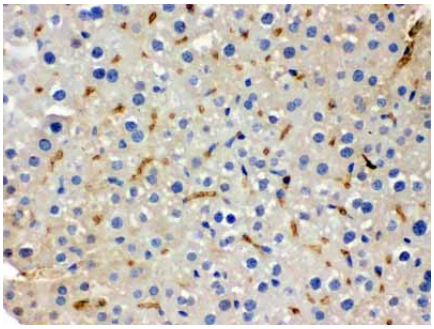
Bone morphogenetic protein 5 is a protein that in humans is encoded by the BMP5 gene. This gene encodes a member of the bone morphogenetic protein family which is part of the transforming growth factor-beta superfamily. The superfamily includes large families of growth and differentiation factors. Bone morphogenetic proteins were originally identified by an ability of demineralized bone extract to induce endochondral osteogenesis in vivo in an extraskeletal site. These proteins are synthesized as prepropeptides, cleaved, and then processed into dimeric proteins. And this protein may act as an important signaling molecule within the trabecular meshwork and optic nerve head, and may play a potential role in glaucoma pathogenesis. This gene is differentially regulated during the formation of various tumors.

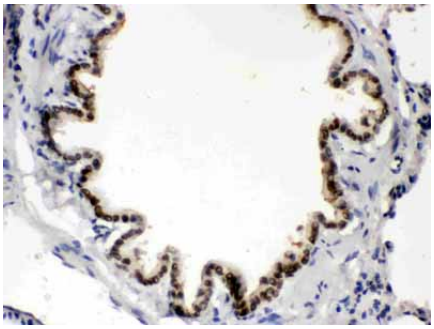
Images



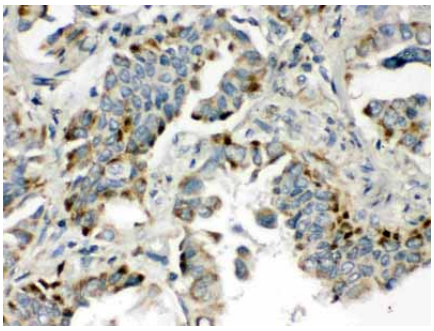
Anti- BMP-5 Picoband antibody, ABO12375, Western blottingAll lanes: Anti BMP-5 (ABO12375) at 0.5ug/mlLane 1: Rat Liver Tissue Lysate at 50ugLane 2: Mouse Liver Tissue Lysate at 50ugLane 3: A549 Whole Cell Lysate at 40ugPredicted bind size: 51KDObserved bind size: 51KD

Anti- BMP-5 Picoband antibody, ABO12375, IHC(P)IHC(P): Mouse Liver Tissue





Anti- BMP5 Picoband antibody, ABO12375, IHC(P)IHC(P): Rat Lung Tissue



Anti- BMP5 Picoband antibody, ABO12375, IHC(P)IHC(P): Human Lung Cancer Tissue

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