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Bmp5 Antibody (N-term)
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP1716a

Specification

Bmp5 Antibody (N-term) - Product Information

Application	**IHC-P, WB,E**
Primary Accession	P22003
Other Accession	P49003
Reactivity	**Human**
Predicted	**Mouse**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**51737**
Antigen Region	**16-46**

Bmp5 Antibody (N-term) - Additional Information

Gene ID 653

Other Names
Bone morphogenetic protein 5, BMP-5, BMP5

Target/Specificity
This Bmp5 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 16-46 amino acids from the N-terminal region of human Bmp5.

Dilution
IHC-P~~1:50~100
WB~~1:1000
E~~Use at an assay dependent concentration.

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
Bmp5 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Bmp5 Antibody (N-term) - 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.

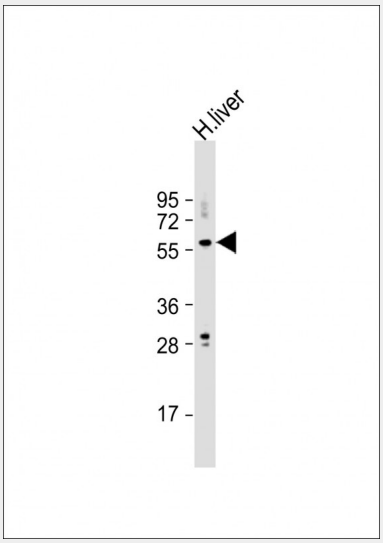
Tissue Location
Expressed in the lung and liver.

Bmp5 Antibody (N-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Bmp5 Antibody (N-term) - Images



Anti-Bmp5 Antibody (N-term) at 1:1000 dilution + human liver lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 52 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

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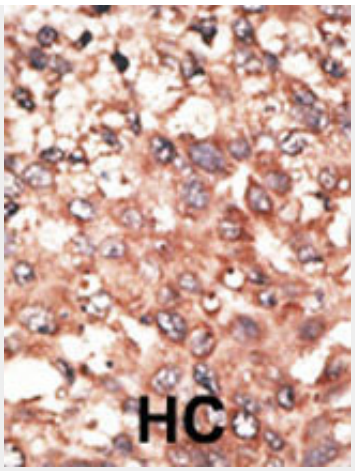

Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by AEC staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.

Bmp5 Antibody (N-term) - Background

Bmp5 is 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. 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.

Bmp5 Antibody (N-term) - References

Luo, J., et al., Prostate 51(3):189-200 (2002).
Jin, Y., et al., Histol. Histopathol. 16(4):1013-1019 (2001).
Sakaue, M., et al., Biochem. Biophys. Res. Commun. 221(3):768-772 (1996).
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Celeste, A.J., et al., Proc. Natl. Acad. Sci. U.S.A. 87(24):9843-9847 (1990).