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Bmp6 Antibody (N-term)
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP1717A

Specification

Bmp6 Antibody (N-term) - Product Information

Application	**IHC-P, WB,E**
Primary Accession	P22004
Other Accession	NP_001709
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Antigen Region	**25-55**

Bmp6 Antibody (N-term) - Additional Information

Gene ID 654

Other Names
Bone morphogenetic protein 6, BMP-6, VG-1-related protein, VG-1-R, VGR-1, BMP6, VGR

Target/Specificity
This Bmp6 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 25-55 amino acids from the N-terminal region of human Bmp6.

Dilution
IHC-P~~1:10~50
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
Bmp6 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Bmp6 Antibody (N-term) - 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).

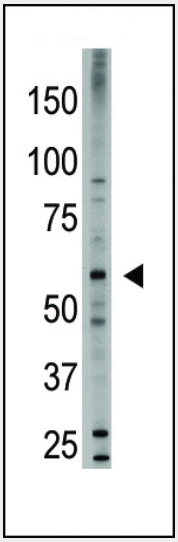
Cellular Location
Secreted.

Bmp6 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

Bmp6 Antibody (N-term) - Images



The anti-Bmp6 (N-term) Pab (Cat. #AP1717a) is used in Western blot to detect Bmp6 in HL60 cell lysate.

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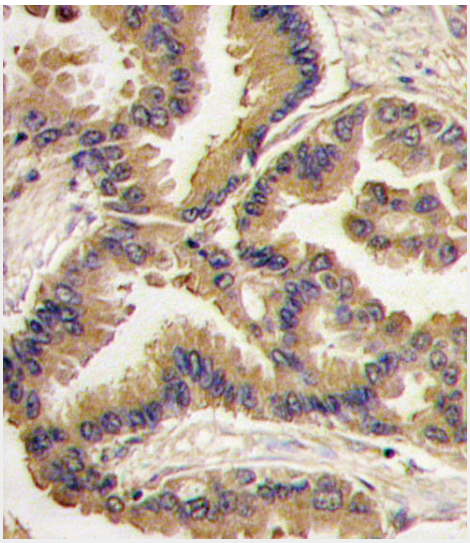

Formalin-fixed and paraffin-embedded human lung carcinoma tissue reacted with Bmp6 antibody (N-term)(Cat. #AP1717a), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

Bmp6 Antibody (N-term) - Background

The bone morphogenetic proteins (BMPs) are a family of secreted signaling molecules that can induce ectopic bone growth. Many BMPs are part of the transforming growth factor-beta (TGFB) superfamily. BMPs were originally identified by an ability of demineralized bone extract to induce endochondral osteogenesis in vivo in an extraskeletal site. Based on its expression early in embryogenesis, Bmp6 has a proposed role in early development. In addition, the fact that BMP6 is closely related to BMP5 and BMP7 has lead to speculation of possible bone inductive activity.

Bmp6 Antibody (N-term) - References

Lories, R.J., et al., Arthritis Rheum. 48(10):2807-2818 (2003).
Bobacz, K., et al., Arthritis Rheum. 48(9):2501-2508 (2003).
Tamada, H., et al., Biochim. Biophys. Acta 1395(3):247-251 (1998).
Rickard, D.J., et al., J. Clin. Invest. 101(2):413-422 (1998).
Olavesen, M.G., et al., Genomics 46(2):303-306 (1997).

Bmp6 Antibody (N-term) - Citations

- Increased BMP6 levels in the brains of Alzheimer\'s disease patients and APP transgenic mice are accompanied by impaired neurogenesis.