

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

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**Bmp6 Antibody (N-term) - Product Information**

Application	WB, IHC-P,E
Primary Accession	<a href="#">P22004</a>
Other Accession	<a href="#">NP_001709</a>
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**

WB~~1:1000

IHC-P~~1:10~50

**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 BMPRI/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

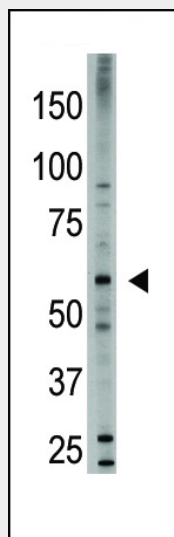
Secreted.

#### Bmp6 Antibody (N-term) - Protocols

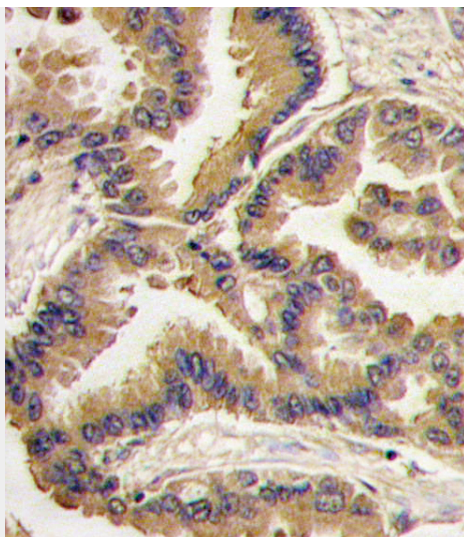
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [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.



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.](#)