

**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	<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

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

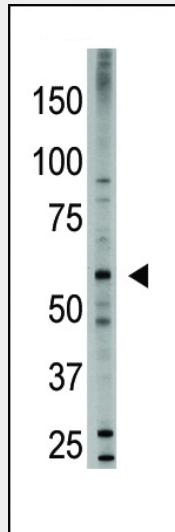
Secreted.

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

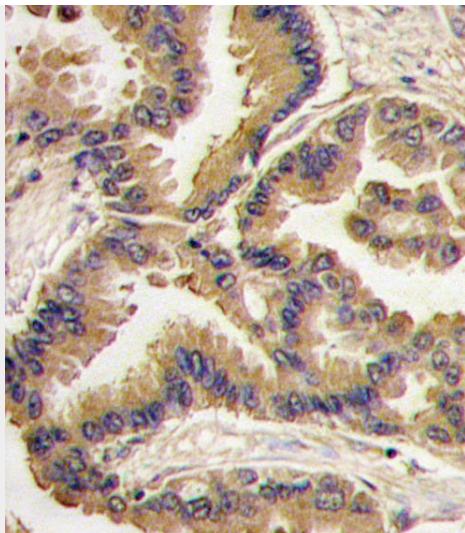
Provided below are standard protocols that you may find useful for product applications.

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