

**Bmp6 Antibody (N-term) Blocking Peptide**  
**Synthetic peptide**  
**Catalog # BP1717a****Specification**

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

Primary Accession [P22004](#)  
Other Accession [NP\\_001709](#)

**Bmp6 Antibody (N-term) Blocking Peptide - 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**

The synthetic peptide sequence used to generate the antibody [AP1717a](/product/products/AP1717a) was selected from the N-term region of human Bmp6. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

**Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

**Bmp6 Antibody (N-term) Blocking Peptide - 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](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/26582087)). Also acts to promote expression of HAMP, potentially via the interaction with its receptor BMPRI/ALK3 (PubMed: [30097509](http://www.uniprot.org/citations/30097509), PubMed: [31800957](http://www.uniprot.org/citations/31800957)). Initiates the

canonical BMP signaling cascade by associating with type I receptor ACVR1 and type II receptor ACVR2B (PubMed:<a href="http://www.uniprot.org/citations/18070108" target="\_blank">18070108</a>). 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:<a href="http://www.uniprot.org/citations/33021694" target="\_blank">33021694</a>).

#### **Cellular Location**

Secreted.

#### **Bmp6 Antibody (N-term) Blocking Peptide - Protocols**

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

- [Blocking Peptides](#)

#### **Bmp6 Antibody (N-term) Blocking Peptide - Images**

#### **Bmp6 Antibody (N-term) Blocking Peptide - 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) Blocking Peptide - 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).