

**BMP-5 Antibody**  
**Rabbit Polyclonal Antibody**  
**Catalog # ABV11041****Specification**

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**BMP-5 Antibody - Product Information**

Application	WB
Primary Accession	<a href="#">P22003</a>
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	51737

**BMP-5 Antibody - Additional Information****Gene ID** 653**Application & Usage**

The antibody can be used in Western Blot analysis (0.5-4 µg/ml). It detects monomer, dimer and trimer of BMP-5.

**Other Names**

BMP5, BMP-5, BMP 5, bone morphogenetic protein 5

**Target/Specificity**

BMP-5

**Antibody Form**

Liquid

**Appearance**

Colorless liquid

**Formulation**

100 µg (0.5 mg/ml) affinity purified rabbit anti-BMP-5 polyclonal antibody in phosphate buffered saline (PBS), pH 7.2, containing 30% glycerol, 0.5% BSA, 0.01% thimerosal.

**Handling**

The antibody solution should be gently mixed before use.

**Reconstitution & Storage**

-20 °C

**Background Descriptions****Precautions**

BMP-5 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

## **BMP-5 Antibody - 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:<a href="http://www.uniprot.org/citations/11580864" target="\_blank">11580864</a>, PubMed:<a href="http://www.uniprot.org/citations/29321139" target="\_blank">29321139</a>). Initiates the canonical BMP signaling cascade by associating with type I receptor BMPRI1 and type II receptor BMPRII (PubMed:<a href="http://www.uniprot.org/citations/11580864" target="\_blank">11580864</a>). In turn, BMPRI1 propagates signal by phosphorylating SMAD1/5/8 that travel to the nucleus and act as activators and repressors of transcription of target genes (PubMed:<a href="http://www.uniprot.org/citations/11580864" target="\_blank">11580864</a>, PubMed:<a href="http://www.uniprot.org/citations/29321139" target="\_blank">29321139</a>). Can also signal through non-canonical pathway such as MAPK p38 signaling cascade to promote chondrogenic differentiation (PubMed:<a href="http://www.uniprot.org/citations/20402566" target="\_blank">20402566</a>). Promotes the expression of HAMP, this is repressed by its interaction with ERFE (PubMed:<a href="http://www.uniprot.org/citations/30097509" target="\_blank">30097509</a>).

### **Cellular Location**

Secreted.

### **Tissue Location**

Expressed in the lung and liver.

## **BMP-5 Antibody - 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](#)

## **BMP-5 Antibody - Images**

## **BMP-5 Antibody - Background**

BMPs (bone morphogenetic proteins) belong to the TGF- $\beta$  superfamily of structurally related signaling proteins. As implied by their name, BMPs promote and regulate bone development, growth, remodeling and repair, in both prenatal development and postnatal growth of eye, heart, kidney, skin, and other tissues. Active human BMP-5 is a 31 kDa homodimeric protein consisting of two 134 amino acid polypeptide chains.