10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

# BMP5 Antibody (internal region)

**Peptide-affinity purified goat antibody**
**Catalog # AF2757a**

## Specification

### BMP5 Antibody (internal region) - Product Information

| | |
|---|---|
| Application | **E** |
| Primary Accession | P22003 |
| Other Accession | NP_066551.1, 653 |
| Predicted | **Human** |
| Host | **Goat** |
| Clonality | **Polyclonal** |
| Concentration | **0.5 mg/ml** |
| Isotype | **IgG** |
| Calculated MW | **51737** |

### BMP5 Antibody (internal region) - Additional Information

**Gene ID** 653

**Other Names**
Bone morphogenetic protein 5, BMP-5, BMP5

**Format**
0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin

**Storage**
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**
BMP5 Antibody (internal region) is for research use only and not for use in diagnostic or therapeutic procedures.

### BMP5 Antibody (internal region) - 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 BMPR1A and type II receptor BMPR2 (PubMed:<a href="http://www.uniprot.org/citations/11580864" target="_blank">11580864</a>). In turn, BMPR1A 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/29321139" target="_blank">29321139</a>, PubMed:<a href="http://www.uniprot.org/citations/11580864" target="_blank">11580864</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.

## BMP5 Antibody (internal region) - 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

## BMP5 Antibody (internal region) - Images

## BMP5 Antibody (internal region) - References

Effect of bone morphogenetic proteins-4, -5 and -6 on DNA synthesis and expression of bone-related proteins in cultured human periodontal ligament cells. Xu WP, Shiba H, Mizuno N, Uchida Y, Mouri Y, Kawaguchi H, Kurihara H. Cell Biol Int. 2004;28(10):675-82. PMID: 15516325