

### **BMP7** Rabbit mAb

**Catalog # AP77237** 

# **Specification**

### **BMP7** Rabbit mAb - Product Information

Application
Primary Accession
Reactivity
Host
Clonality
Calculated MW

WB P18075 Human, Mouse, Rat Rabbit Monoclonal Antibody 49313

## **BMP7** Rabbit mAb - Additional Information

Gene ID 655

Other Names BMP7

**Dilution** WB~~1/500-1/1000

Format Liquid

## **BMP7 Rabbit mAb - Protein Information**

Name BMP7

Synonyms OP1

### **Function**

Growth factor of the TGF-beta superfamily that plays important role in various biological processes, including embryogenesis, hematopoiesis, neurogenesis and skeletal morphogenesis (PubMed:<a href="http://www.uniprot.org/citations/31208997" target=" blank">31208997</a>). Initiates the canonical BMP signaling cascade by associating with type I receptor ACVR1 and type II receptor ACVR2A (PubMed:<a href="http://www.uniprot.org/citations/12667445" target=" blank">12667445</a>, PubMed:<a href="http://www.uniprot.org/citations/9748228" target="blank">9748228</a>). Once all three components are bound together in a complex at the cell surface, ACVR2A phosphorylates and activates ACVR1. 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 genes (PubMed: <a href="http://www.uniprot.org/citations/12478285" target=" blank">12478285</a>). For specific functions such as growth cone collapse in developing spinal neurons and chemotaxis of monocytes, uses also BMPR2 as type II receptor (PubMed:<a href="http://www.uniprot.org/citations/31208997" target=" blank">31208997</a>). Can also signal through non-canonical pathways such as P38 MAP kinase signaling cascade that promotes brown adipocyte differentiation through activation of target genes, including members of the SOX family of transcription factors (PubMed:<a





href="http://www.uniprot.org/citations/27923061" target="\_blank">27923061</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 kidney and bladder. Lower levels seen in the brain

## **BMP7** Rabbit mAb - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

# BMP7 Rabbit mAb - Images

