

### Bmp7 antibody - N-terminal region

Rabbit Polyclonal Antibody Catalog # Al10346

#### **Specification**

### Bmp7 antibody - N-terminal region - Product Information

Application WB, IHC Primary Accession P18075

Other Accession NM 001191856, BAA31853

Reactivity Human, Mouse, Rat, Pig, Horse, Bovine,

Dog

Predicted Human, Mouse, Rat, Pig, Chicken, Bovine,

Guinea Pig, Dog

Host Rabbit
Clonality Polyclonal
Calculated MW 16kDa KDa

# Bmp7 antibody - N-terminal region - Additional Information

Gene ID 655

Alias Symbol BMP-7, Bmp7

**Other Names** 

Bone morphogenetic protein 7, BMP-7, Osteogenic protein 1, OP-1, Eptotermin alfa, BMP7, OP1

#### **Format**

Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.

#### **Reconstitution & Storage**

Add 50 ul of distilled water. Final anti-Bmp7 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.

#### **Precautions**

Bmp7 antibody - N-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

### **Bmp7 antibody - N-terminal region - 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, also uses 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 antibody - N-terminal region - Protocols**

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

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