

**Bmp7 antibody - N-terminal region**  
**Rabbit Polyclonal Antibody**  
**Catalog # AI10346****Specification****Bmp7 antibody - N-terminal region - Product Information**

Application	WB, IHC
Primary Accession	<a href="#">P18075</a>
Other Accession	<a href="#">NM_001191856</a> , <a href="#">BAA31853</a>
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:&lt;a href="http://www.uniprot.org/citations/31208997" target="\_blank"&gt;31208997&lt;/a&gt;). Initiates the canonical BMP signaling cascade by associating with type I receptor ACVR1 and type II receptor ACVR2A (PubMed:&lt;a href="http://www.uniprot.org/citations/12667445" target="\_blank"&gt;12667445&lt;/a&gt;)

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](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)