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Bmp7 antibody - N-terminal region
Rabbit Polyclonal Antibody
Catalog # AI10346

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:31208997). 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, PubMed:9748228). 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:12478285). For specific functions such as growth cone collapse in developing spinal neurons and chemotaxis of monocytes, uses also BMPR2 as type II receptor (PubMed:31208997). 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:27923061). Promotes the expression of HAMP, this is repressed by its interaction with ERFE (PubMed:30097509).

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 Cytomety
- Cell Culture