

# BMP-7 Polyclonal Antibody

Catalog # AP68686

## Product Information

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Application	WB, IHC-P
Primary Accession	<a href="#">P18075</a>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	49313

## Additional Information

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Gene ID	655
Other Names	BMP7; OP1; Bone morphogenetic protein 7; BMP-7; Osteogenic protein 1; OP-1; Eptotermin alfa
Dilution	WB~~Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. ELISA: 1/40000. Not yet tested in other applications. IHC-P~~N/A
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20°C

## Protein Information

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Name	BMP7
Synonyms	OP1
Function	<p>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="#">31208997</a>). Initiates the canonical BMP signaling cascade by associating with type I receptor ACVR1 and type II receptor ACVR2A (PubMed:<a href="#">12667445</a>, PubMed:<a href="#">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="#">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="#">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="#">27923061</a>). Promotes the</p>

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

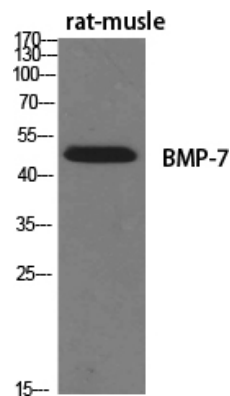
## Background

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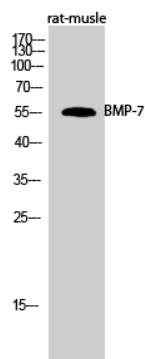
Induces cartilage and bone formation. May be the osteoinductive factor responsible for the phenomenon of epithelial osteogenesis. Plays a role in calcium regulation and bone homeostasis.

## Images

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Western Blot analysis of various cells using BMP-7 Polyclonal Antibody diluted at 1 : 500



Western Blot analysis of rat-muscle cells using BMP-7 Polyclonal Antibody diluted at 1 : 500

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.