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Goat Anti-BMP7 Antibody (aa120-131) (internal region)

Catalog # AF4301a

Product Information

Application	WB, E
Primary Accession	P18075
Other Accession	NP_001710.1, 85272, 12162, 655
Reactivity	Pig
Predicted	Human, Mouse, Rat, Pig, Dog
Host	Goat
Isotype	IgG
Calculated MW	49313

Additional Information

Gene ID	655
Other Names	Bone morphogenetic protein 7, BMP-7, Osteogenic protein 1, OP-1, Eptotermin alfa, BMP7, OP1
Dilution	WB~~1:1000 E~~N/A
Immunogen	This antibody is expected to recognize precursor only.
Storage	Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	Goat Anti-BMP7 Antibody (aa120-131) (internal region) is for research use only and not for use in diagnostic or therapeutic procedures.

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: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, also uses 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

Images



AF4301a (1 µg/ml) staining of Pig Kidney lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

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