

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

Catalog # AF4301a

Specification

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

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

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

Gene ID 655

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

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.

Goat Anti-BMP7 Antibody (aa120-131) (internal 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:9748228, PubMed:12667445). 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

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

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

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

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



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