

BMP7 Rabbit mAb

Catalog # AP77237

Product Information

Application WB, IP **Primary Accession** P18075

Reactivity Rat, Human, Mouse

Host Rabbit

Clonality Monoclonal Antibody

Isotype IgG

Conjugate Unconjugated

Immunogen A synthesized peptide derived from human BMP7

Purification Affinity Chromatography

Calculated MW 49313

Additional Information

Gene ID 655

Other Names BMP7

Dilution WB~~1/500-1/1000 IP~~N/A

Format Liquid in 10mM PBS, pH 7.4, 150mM sodium chloride, 0.05% BSA, 0.02%

sodium azide and 50% glycerol.

Storage Store at 4°C short term. Aliquot and store at -20°C long term. Avoid

freeze/thaw cycles.

Protein Information

Name BMP7

Synonyms OP1

Function Growth factor of the TGF-beta superfamily that plays important role in

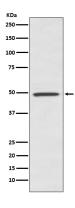
various biological processes, including embryogenesis, hematopoiesis, neurogenesis and skeletal morphogenesis (PubMed:31208997). Initiates the canonical BMP signaling cascade by associating with type I receptor ACVR1 and type II receptor ACVR2A (PubMed:12667445, PubMed:9748228). Once all three components 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



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