

BMP7 Rabbit mAb

Catalog # AP77237

Specification

BMP7 Rabbit mAb - Product Information

Application Primary Accession Reactivity Host Clonality Calculated MW WB <u>P18075</u> Human, Mouse, Rat Rabbit Monoclonal Antibody 49313

BMP7 Rabbit mAb - Additional Information

Gene ID 655

Other Names BMP7

Dilution WB~~1/500-1/1000

Format Liquid

BMP7 Rabbit mAb - 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, 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:<a



href="http://www.uniprot.org/citations/27923061" target="_blank">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 Rabbit mAb - 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>

BMP7 Rabbit mAb - Images

