

BMP5 Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP51013

Product Information

Application	WB, IHC-P
Primary Accession	<u>P22003</u>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	51737

Additional Information

Gene ID	653
Other Names	Bone morphogenetic protein 5, BMP-5, BMP5
Dilution	WB~~1:1000 IHC-P~~N/A
Format	0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

Name	BMP5
Function	Growth factor of the TGF-beta superfamily that plays essential roles in many developmental processes, including cartilage and bone formation or neurogenesis (PubMed: <u>11580864</u> , PubMed: <u>29321139</u>). Initiates the canonical BMP signaling cascade by associating with type I receptor BMPR1A and type II receptor BMPR2 (PubMed: <u>11580864</u>). In turn, BMPR1A propagates signal by phosphorylating SMAD1/5/8 that travel to the nucleus and act as activators and repressors of transcription of target genes (PubMed: <u>11580864</u> , PubMed: <u>29321139</u>). Can also signal through non-canonical pathway such as MAPK p38 signaling cascade to promote chondrogenic differentiation (PubMed: <u>20402566</u>). Promotes the expression of HAMP, this is repressed by its interaction with ERFE (PubMed: <u>30097509</u>).
Cellular Location	Secreted.
Tissue Location	Expressed in the lung and liver.
Background	

Induces cartilage and bone formation.

References

Celeste A.J., et al. Proc. Natl. Acad. Sci. U.S.A. 87:9843-9847(1990). Mungall A.J., et al. Nature 425:805-811(2003).

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