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BMP5 Rabbit pAb

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Catalog # AP52163

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	P22003
Predicted	Rat, Pig, Human, Mouse, Rabbit, Chicken, Horse, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	51737
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human BMP5
Epitope Specificity	317-360/454
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Secreted.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	This gene encodes a member of the bone morphogenetic protein family which is part of the transforming growth factor-beta superfamily. The superfamily includes large families of growth and differentiation factors. Bone morphogenetic proteins were originally identified by an ability of demineralized bone extract to induce endochondral osteogenesis in vivo in an extraskeletal site. These proteins are synthesized as prepropeptides, cleaved, and then processed into dimeric proteins. This protein may act as an important signaling molecule within the trabecular meshwork and optic nerve head, and may play a potential role in glaucoma pathogenesis. This gene is differentially regulated during the formation of various tumors. [provided by RefSeq, Jul 2008].

Additional Information

Gene ID	653
Other Names	Bone morphogenetic protein 5, BMP-5, BMP5
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500,ELISA=1:5000-10000
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

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:11580864, PubMed:29321139). Initiates the canonical BMP signaling cascade by associating with type I receptor BMPR1A and type II receptor BMPR2 (PubMed:11580864). 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:11580864, PubMed:29321139). Can also signal through non-canonical pathway such as MAPK p38 signaling cascade to promote chondrogenic differentiation (PubMed:20402566). Promotes the expression of HAMP, this is repressed by its interaction with ERFE (PubMed:30097509).
Cellular Location	Secreted.
Tissue Location	Expressed in the lung and liver.

Background

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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).

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