

## BMP-4 Monoclonal Antibody

<b>Catalog No :</b>	YM0073
<b>Reactivity :</b>	Human
<b>Applications :</b>	WB;ELISA
<b>Target :</b>	BMP-4
<b>Fields :</b>	>>Cytokine-cytokine receptor interaction;>>TGF-beta signaling pathway;>>Hippo signaling pathway;>>Signaling pathways regulating pluripotency of stem cells;>>Thyroid hormone signaling pathway;>>Pathways in cancer;>>Basal cell carcinoma;>>Fluid shear stress and atherosclerosis
<b>Gene Name :</b>	BMP4
<b>Protein Name :</b>	Bone morphogenetic protein 4
<b>Human Gene Id :</b>	652
<b>Human Swiss Prot No :</b>	P12644
<b>Mouse Swiss Prot No :</b>	P21275
<b>Immunogen :</b>	Purified recombinant fragment of human BMP-4 expressed in E. Coli.
<b>Specificity :</b>	BMP-4 Monoclonal Antibody detects endogenous levels of BMP-4 protein.
<b>Formulation :</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source :</b>	Monoclonal, Mouse
<b>Dilution :</b>	WB 1:500 - 1:2000. ELISA: 1:10000. Not yet tested in other applications.
<b>Purification :</b>	Affinity purification
<b>Storage Stability :</b>	-15°C to -25°C/1 year(Do not lower than -25°C)
<b>Molecularweight :</b>	47kD

**Cell Pathway :** Hedgehog;TGF-beta;Pathways in cancer;Basal cell carcinoma;

**P References :**

1. Genomics. 1995 Jun 10;27(3):559-60.
2. DNA Seq. 1995;5(5):273-5.
3. J Bone Miner Res. 2009 Dec;24(12):2039-49.
4. Stem Cells Dev. 2009 Nov;18(9):1283-92.

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**Background :** This gene encodes a secreted ligand of the TGF-beta (transforming growth factor-beta) superfamily of proteins. Ligands of this family bind various TGF-beta receptors leading to recruitment and activation of SMAD family transcription factors that regulate gene expression. The encoded preproprotein is proteolytically processed to generate each subunit of the disulfide-linked homodimer. This protein regulates heart development and adipogenesis. Mutations in this gene are associated with orofacial cleft and microphthalmia in human patients. The encoded protein may also be involved in the pathology of multiple cardiovascular diseases and human cancers. [provided by RefSeq, Jul 2016],

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**Function :** disease:Defects in BMP4 are the cause of microphthalmia syndromic type 6 (MCOPS6) [MIM:607932]; also known as microphthalmia and pituitary anomalies or microphthalmia with brain and digit developmental anomalies. Microphthalmia is a clinically heterogeneous disorder of eye formation, ranging from small size of a single eye to complete bilateral absence of ocular tissues (anophthalmia). In many cases, microphthalmia/anophthalmia occurs in association with syndromes that include non-ocular abnormalities. MCOPS6 is characterized by microphthalmia/anophthalmia associated with facial, genital, skeletal, neurologic and endocrine anomalies.,function:Induces cartilage and bone formation. Also act in mesoderm induction, tooth development, limb formation and fracture repair.,online information:Bone morphogenetic protein 4 entry,similarity:Belongs to the TGF-beta family.,subunit:Homodimer; disulfid

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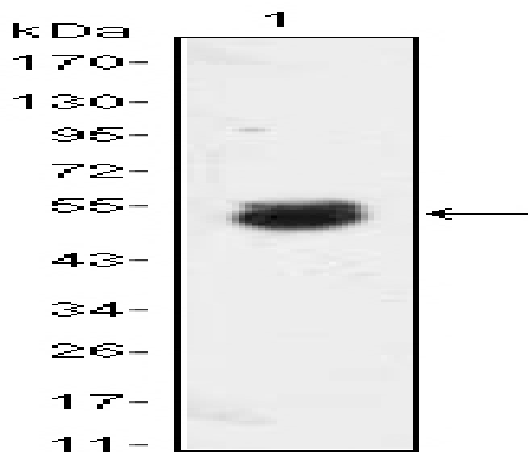
**Subcellular Location :** Secreted, extracellular space, extracellular matrix.

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**Expression :** Expressed in the lung and lower levels seen in the kidney. Present also in normal and neoplastic prostate tissues, and prostate cancer cell lines.

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## Products Images



Western Blot analysis using BMP-4 Monoclonal Antibody against BMP4-hlgGfc transfected HEK293 cell lysate.