

Rabbit Anti-BMP4 antibody

SL1374R

Product Name:	BMP4
Chinese Name:	骨形态发生蛋白4抗体
Alias:	BMP 4; BMP2B; BMP2B1; Bone morphogenetic protein 4; DVR4; ZYME; BMP4_HUMAN; BMP-4; Bone morphogenetic protein 2B; BMP-2B.
文献引用	Specific References(1) SL1374R has been referenced in 1 publications. [IF=2.84] Wang, Xiaoli, Yansong Zhao, and Xin Wang. "Umbilical cord blood cells
Pub Med	regulate the differentiation of endogenous neural stem cells in hypoxic ischemic
	neonatal rats via the hedgehog signaling pathway." Brain Research (2014).IHC-P;Rat.
	PubMed:24565927
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Sheep,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	13/45kDa
Cellular localization:	Extracellular matrixSecretory protein
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human BMP4:293-450/408
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 °C. 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.
PubMed:	PubMed
	BMPs (bone morphogenetic proteins) belong to the TGF beta superfamily of structurall related signaling proteins. Members of this superfamily are widely represented
	throughout the animal kingdom and have been implicated in a variety of developmental processes. Proteins of the TGF beta superfamily are disulfide-linked dimers composed of two 12-15 kDa polypeptide chains. As implied by their name, BMPs initiate, promote and regulate bone development, growth, remodeling and repair. Smad1 translocation to the nucleus is observed after the addition of BMP4 (also designated BMP2B), suggesting that BMP4 may play a role in activation of the Smad pathway. BMP is secreted into the extracellular matrix.
	Function: Induces cartilage and bone formation. Also act in mesoderm induction, tooth development, limb formation and fracture repair. Acts in concert with PTHLH/PTHRP to stimulate ductal outgrowth during embryonic mammary development and to inhibit hair follicle induction.
	Subunit: Homodimer; disulfide-linked. Interacts with GREM2. Part of a complex consisting of TWSG1 and CHRD. Interacts with the serine proteases, HTRA1 and HTRA3; the interaction with either inhibits BMP4-mediated signaling. The HTRA protease activity required for this inhibition. Interacts with SOSTDC1.
Product Detail:	Subcellular Location:

Secreted, extracellular space, extracellular matrix.

Tissue Specificity:

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

DISEASE:

Microphthalmia, syndromic, 6 (MCOPS6) [MIM:607932]: A disease characterized by microphthalmia/anophthalmia associated with facial, genital, skeletal, neurologic and endocrine anomalies. Microphthalmia is a 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. Note=The disease is caused by mutations affecting the gene represented in this entry.

Non-syndromic orofacial cleft 11 (OFC11) [MIM:600625]: A birth defect consisting of cleft lips with or without cleft palate. Cleft lips are associated with cleft palate in twothird of cases. A cleft lip can occur on one or both sides and range in severity from a simple notch in the upper lip to a complete opening in the lip extending into the floor of the nostril and involving the upper gum. Note=The disease is caused by mutations affecting the gene represented in this entry.

Similarity:

Belongs to the TGF-beta family.

SWISS:

P12644

Gene ID:

652

Database links:

Entrez Gene: 407216Cow

Entrez Gene: 652Human

Entrez Gene: 12159 Mouse

Entrez Gene: 100113425Pig

Entrez Gene: 25296Rat

Omim: 112262Human

SwissProt: Q2KJH1Cow

SwissProt: P12644Human

SwissProt: P21275Mouse

SwissProt: Q06826Rat

Unigene: 68879Human

Unigene: 6813Mouse

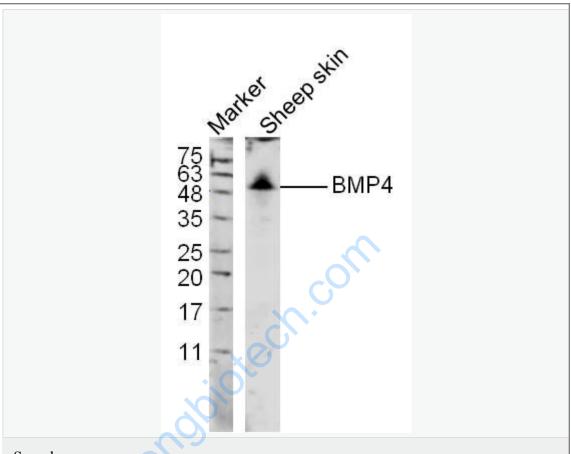
Unigene: 10318Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

骨形态发生蛋白-

4(BMP4)是转化生长因子β超家族成员,也参与器官发生,细胞增殖、分化及凋亡等。



Picture:

Sample:

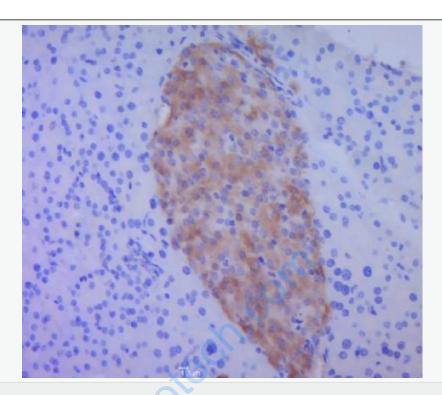
Sheep skin (Sheep) Lysate at 40 ug

Primary: Anti-BMP4 (SL1374R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 13/45 kD

Observed band size: 50 kD



Paraformaldehyde-fixed, paraffin embedded (mouse pancreas tissue); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (BMP4) Polyclonal Antibody, Unconjugated (SL1374R) at 1:400 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.