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Rabbit Anti-BMP4/AF350 Conjugated antibody

SL1374R-AF350

Product Name	Anti-BMP4/AF350
Chinese Name	AF350 标记的骨形态发生蛋白 4 抗体
Alias	BMP 4; BMP2B; BMP2B1; Bone morphogenetic protein 4; DVR4; ZYME; BMP4_HUMAN; BMP-4; Bone morphogenetic protein 2B; BMP-2B.
Research Area	Cell biology immunology Apoptosis
Immunogen Species	Rabbit
Clonality	Polyclonal
React Species	Mouse,Sheep(predicted:Human,Rat)
Applications	not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight	13/45kDa
Form	Lyophilized or Liquid
Concentration	1mg/ml
immunogen	KLH conjugated synthetic peptide derived from human BMP4
Lsotype	IgG
Purification	affinity purified by Protein A
Storage Buffer	1M TBS(pH7.4) with 1% BSA, 3% 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 1M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
Product Detail	**background:** BMPs (bone morphogenetic proteins) belong to the TGF beta superfamily of structurally 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 is required for this inhibition. Interacts with SOSTDC1.

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 two-third 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.

Database links:

Entrez Gene: 407216 Cow

Entrez Gene: 652 Human

Entrez Gene: 12159 Mouse

Entrez Gene: 100113425 Pig

Entrez Gene: 25296 Rat

Omim: 112262 Human

SwissProt: Q2KJH1 Cow

SwissProt: P12644 Human

SwissProt: P21275 Mouse

SwissProt: Q06826 Rat

Unigene: 68879 Human

Unigene: 6813 Mouse

Unigene: 10318 Rat

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。