

产品名称: BMP4 (16W18) Rabbit Monoclonal Antibody
产品货号: AMRe07598



产品概述 (Summary)

产品名称 (Production Name)	BMP4 (16W18) Rabbit Monoclonal Antibody
描述 (Description)	Recombinant rabbit monoclonal antibody
宿主 (Host)	Rabbit
应用 (Application)	WB,IHC,ICC/IF,FC,IP
种属反应性 (Reactivity)	Human

产品性能 (Performance)

偶联物 (Conjugation)	Unconjugated
修饰 (Modification)	Unmodified
同种型 (Isotype)	IgG
克隆 (Clonality)	Monoclonal
形式 (Form)	Liquid
存放说明 (Storage)	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
储存溶液 (Buffer)	Supplied in 50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40%Glycerol, 0.01% New type preservative N and 0.05% protective protein.
纯化方式 (Purification)	Affinity purification

免疫原信息 (Immunogen)

基因名 (Gene Name)	BMP4
别名 (Alternative Names)	BMP-2B; BMP-4; BMP2B; BMP2B1; bone morphogenetic protein 4; DVR4; ZYME
基因 ID (Gene ID)	652.0
蛋白 ID (SwissProt ID)	P12644.A synthetic peptide of human BMP4

产品应用 (Application)

稀释比 (Dilution Ratio)	WB 1:2000-1:10000,IHC 1:20-1:100,ICC/IF 1:100-1:200,FC 1:20-1:100,IP 1:20-1:50
蛋白分子量 (Molecular Weight)	47kDa

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研究背景 (Background)

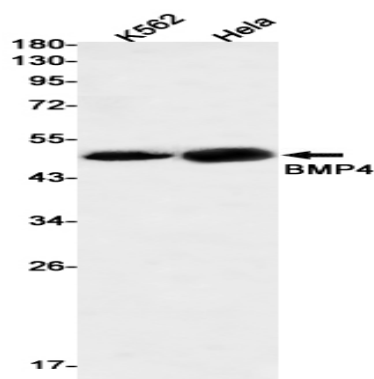
Bone morphogenetic proteins (BMPs) were first identified as molecules that can induce ectopic bone and cartilage formation. BMPs belongs to the TGF- β superfamily, playing many diverse functions during development. BMPs are synthesized as precursor proteins and then processed by cleavage to release the c-terminal mature BMP. BMPs initiate signaling by binding to a receptor complex containing type I and type II serine/threonine receptor kinases that then phosphorylate Smad (mainly Smad1, 5 and 8), resulting the translocation of Smad into the nucleus. BMP was also reported to activate MAPK pathways in some systems. Growth factor of the TGF-beta superfamily that plays essential roles in many developmental processes, including neurogenesis, vascular development, angiogenesis and osteogenesis (PubMed:31363885). Acts in concert with PTHLH/PTHRP to stimulate ductal outgrowth during embryonic mammary development and to inhibit hair follicle induction (By similarity). Initiates the canonical BMP signaling cascade by associating with type I receptor BMPR1A and type II receptor BMPR2 (PubMed:25868050, PubMed:8006002). Once all three components are bound together in a complex at the cell surface, BMPR2 phosphorylates and activates BMPR1A. 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:25868050, PubMed:29212066). Can also signal through non-canonical BMP pathways such as ERK/MAP kinase, PI3K/Akt, or SRC cascades (PubMed:31363885). For example, induces SRC phosphorylation which, in turn, activates VEGFR2, leading to an angiogenic response (PubMed:31363885).

研究领域 (Research Area)

Cardiovascular; Angiogenesis; Growth Factors; TGF; Stem Cells; Signaling Pathways; TGF beta; Secreted; Developmental Biology; Organogenesis; Gut development; Gut specification; Nervous system development; Excretory system development; Kidney development

图片 (Image Data)

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Western blot detection of BMP4 in K562, HeLa cell lysates using BMP4 antibody (1:500 diluted).

注意事项 (Note)

For research use only .