

Bone Morphogenetic Protein 4 (BMP4) Active Protein | BMP4 active protein

Active Bone Morphogenetic Protein 4 (BMP4)

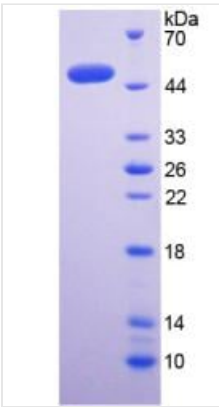
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA148234	E Coli	Human	Activity Assay, Cell Culture

PRODUCT SYNONYMS

Bone Morphogenetic Protein 4 (BMP4); Active Bone Morphogenetic Protein 4 (BMP4); BMP2B; BMP2-B; BMP2B1; ZYME; DVR4; Bone morphogenetic protein 2B; BMP4 active protein

PRODUCT SPECIFICATIONS

Host	E Coli
Reactivity	Human
Purity/Purification	> 97%
Form/Format	Freeze-dried powder
Sequence Length	408
Applicable Applications for BMP4 active protein	Activity Assay, Cell Culture
Tag	N-terminal His Tag
Buffer Formulation	20mM Tris, 150mM NaCl, pH8.0, containing 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose and Proclin300.
Fragment	Ser22~Arg408
Isoelectric Point	9



SDS-PAGE

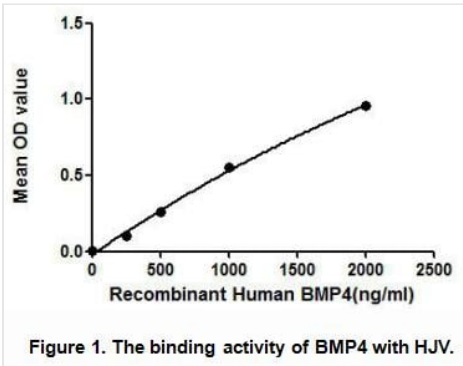


Figure 1. The binding activity of BMP4 with HJV.

Activity

BMP4 (Bone morphogenetic protein 4) is a member of the bone morphogenetic protein family, which is involved in bone and cartilage development, specifically tooth and limb development and fracture repair. It has been proven that HJV (Hemojuvelin) acts as a coreceptor of BMPs, including BMP4; therefore, a binding ELISA assay was constructed to detect the association of recombinant human BMP4 with recombinant human HJV. Briefly, BMP4 were diluted serially in PBS, with 0.01%BSA (pH 7.4). Duplicate samples of 100uL were then transferred to HJV-coated microtiter wells and incubated for 2h at 37 degree C. Wells were washed with PBST and incubated for 1h with anti-BMP4 pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody, wells were aspirated and washed 3 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37 degree C. Finally, add 50uL stop solution to the wells and read at 450nm immediately. The binding activity of BMP4 with HJV was shown in Figure 1 and this effect was in a dose dependent manner.

ADDITIONAL INFORMATION

Product Categories/Family for BMP4 active protein	Developmental science; Bone metabolism
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NCBI AND UNIPROT INFORMATION

NCBI GI #	157276593
NCBI GeneID	652
NCBI Accession #	NP_001193.2
NCBI GenBank Nucleotide #	NM_001202.5
UniProt Accession #	P12644; Q9UM80
Molecular Weight	Predicted Molecular Weight: 48.0kDa Accurate Molecular Weight: 48kDa
NCBI Official Full Name	bone morphogenetic protein 4 isoform a preproprotein
NCBI Official Synonym Full Names	bone morphogenetic protein 4
NCBI Official Symbol	BMP4
NCBI Official Synonym Symbols	ZYME; BMP2B; OFC11; BMP2B1; MCOPS6
NCBI Protein Information	bone morphogenetic protein 4
UniProt Protein Name	Bone morphogenetic protein 4
UniProt Gene Name	BMP4
UniProt Synonym Gene Names	BMP2B; DVR4; BMP-4; BMP-2B

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

