

BMP-4 elisa kit

Bovine BMP-4 PicoKine ELISA Kit

CATALOG # AAA124770	REACTIVITY Bovine There is no detectable cross-reactivity with other relevant proteins.	APPLICATIONS ELISA
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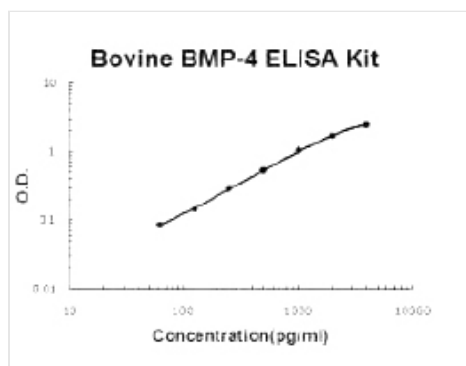
PRODUCT SYNONYMS

BMP-4; Bovine BMP-4 PicoKine ELISA Kit; Bone morphogenetic protein 4; Bone morphogenetic protein 2B; BMP-2B; BMP4; BMP2B; DVR4; BMP-4 elisa kit

PRODUCT SPECIFICATIONS

Reactivity	Bovine There is no detectable cross-reactivity with other relevant proteins.
Specificity	Natural and recombinant Bovine BMP-4
Sequence Length	408
Assay Type	Quantitative Sandwich
Detection Range	62.5pg/ml-4000pg/ml
Sensitivity	<4pg/ml
Applicable Applications for BMP-4 elisa kit	ELISA
Intra-assay Precision	Intra-Assay Precision (Precision within an assay) Three samples of known concentration weretested on one plate to assess intra-assay precision
Inter-assay Precision	Inter-Assay Precision (Precision between assays) Three samples of known concentration weretested in separate assays to assess inter-assay precision.
Preparation and Storage	Store at 4 degree C for 6 months, at -20 degree C for 12 months. Avoid multiple freeze-thaw cycles.

IMAGES



Standard Curve (Sample)

ADDITIONAL INFORMATION

Related Product Information for BMP-4 elisa kit	Principle of the Assay: Bovine BMP-4 ELISA Kit was based on standard sandwich enzyme-linked immune-sorbent assay technology. A monoclonal antibody from mouse specific for Bovine BMP-4 has been precoated onto 96-well plates. Standards(Expression system for standard: NSO; Immunogen sequence: S293-R408) and test samples are added to the wells, a biotinylated detection polyclonal antibody from goat specific for Bovine BMP-4 is added subsequently and then followed by washing with PBS or TBS buffer. Avidin-Biotin-Peroxidase Complex was added and unbound conjugates were washed away with PBS or TBS buffer. HRP substrate TMB was used to visualize HRP enzymatic reaction. TMB was catalyzed by HRP to produce a blue color product that changed into yellow after adding acidic stop solution. The density of yellow is proportional to the Bovine BMP-4 amount of sample captured in plate. Background: Bone morphogenetic protein 4 is a protein that in humans is encoded by the BMP4 gene which is located to 14q22-q23.1. The protein encoded by this gene is a member of the bone morphogenetic protein family which is part of the transforming growth factor-beta superfamily. BMP4 is a polypeptide belonging to the TGF-beta superfamily of proteins. It, like other bone morphogenetic proteins, is involved in bone and cartilage development, specifically tooth and limb development and fracture repair. It has been shown to be involved in muscle development, bone mineralization, and uterine bud development. BMP4 has also been implicated in Fibrodysplasia Ossificans Progressiva in which it is underexpressed. In Bovine embryonic development, BMP4 is a critical signaling molecule required for the early differentiation of the embryo and establishing of a dorsal-ventral axis. BMP4 is secreted from the dorsal portion of the notochord, and it acts in concert with sonic hedgehog(released from the ventral portion of the notochord) to establish a dorsal-ventral axis for the differentiation of later structures. BMP4 stimulates differentiation of overlying ectodermal tissue. Inhibition of the BMP4 signal(by chordin, noggin, or follistatin) causes the ectoderm to differentiate into the neural plate. The standard product used in this kit is recombinant BMP-4 with the molecular mass of 26KDa.
Product Categories/Family for BMP-4 elisa kit	Cardiovascular; Angiogenesis; Growth Factors; TGF; Signal Transduction; Growth Factors/Hormones; Stem Cells; Signaling Pathways; TGF Beta; Secreted; Cancer; Developmental Biology; Organogenesis; Gut Development; Gut Specification; Nervous System Development

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	46555 MW
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.