Datasheet for ABIN5510537

BMP4 ELISA Kit

1 Image

Go to Product page

Overview

Quantity:	96 tests
Target:	BMP4
Binding Specificity:	AA 293-408
Reactivity:	Monkey
Method Type:	Sandwich ELISA
Application:	ELISA

Product Details

Purpose:	Sandwich High Sensitivity ELISA kit for Quantitative Detection of monkey primate BMP-4
Brand:	PicoKine™
Analytical Method:	Quantitative
Detection Method:	Colorimetric
Specificity:	Expression system for standard: NSO Immunogen sequence: S293-R408
Cross-Reactivity (Details):	There is no detectable cross-reactivity with other relevant proteins.
Characteristics:	Sequence similarities: Belongs to the TGF-beta family. 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.

Target Details

Target:	BMP4

Target Details

Alternative Name:	BMP4 (BMP4 Products)
Background:	Protein 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 (By similarity). . 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 uteric bud development. BMP4 has also been implicated in Fibrodysplasia Ossificans Progressiva in which it is underexpressed. In monkey primate 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. Synonyms: Bone morphogenetic protein 4,BMP-4,Bone morphogenetic protein 2B,BMP-2B,BMP4,BMP2B, DVR4, Full Gene Name: Bone morphogenetic protein 4 Cellular Localisation: Secreted, extracellular space, extracellular matrix.
UniProt:	P12644
Pathways:	Steroid Hormone Mediated Signaling Pathway, Regulation of Muscle Cell Differentiation, Tube Formation, Skeletal Muscle Fiber Development

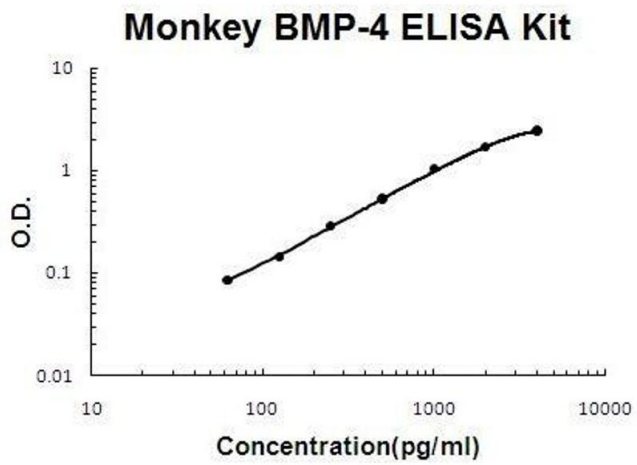
Application Details

Plate:	Pre-coated
Restrictions:	For Research Use only

Handling

Storage:	4 °C,-20 °C
Storage Comment:	Store at 4°C for 6 months, at -20°C for 12 months. Avoid multiple freeze-thaw cycles(Shipped with wet ice.)
Expiry Date:	12 months

Images



ELISA

Image 1. Monkey Primate BMP-4 PicoKine ELISA Kit standard curve