

Catalog No. LF-PA0093

POLYCLONAL ANTIBODY



## Anti-Bone morphogenetic protein 4(BMP4)

**Background :** Bone morphogenetic protein 4, also known as BMP4, is a member of the bone morphogenetic protein family which is part of the transforming growth factor- $\beta$  superfamily. The superfamily includes large families of growth and differentiation factors. Bone morphogenetic proteins were originally identified by an ability of demineralized bone extract to induce endochondral osteogenesis in vivo. BMPs also regulate cell proliferation, differentiation, lineage determination, motility, and death. BMP4 is a potent bone-inducing morphogen, and a reduction in expression has been associated with a variety of bone diseases, including the heritable disorder Fibrodysplasia Ossificans Progressiva. BMP4 is a critical signaling molecule required for the early differentiation of the embryo and establishing of a dorsal-ventral axis. It also plays a role in the epithelial-mesenchymal interactions leading to tooth formation. Both BMP2 and BMP4 have been found in calcified atherosclerotic plaques and aortic valve diseases, which suggests their importance in cardiovascular diseases.

**Immunogen :** Synthetic peptide (DEYDKVVLKKNYQEC)

**Host :** Rabbit

**Composition :** Heses with 0.15M NaCl, 0.01% BSA, 0.03% sodium azide, and 50% glycerol

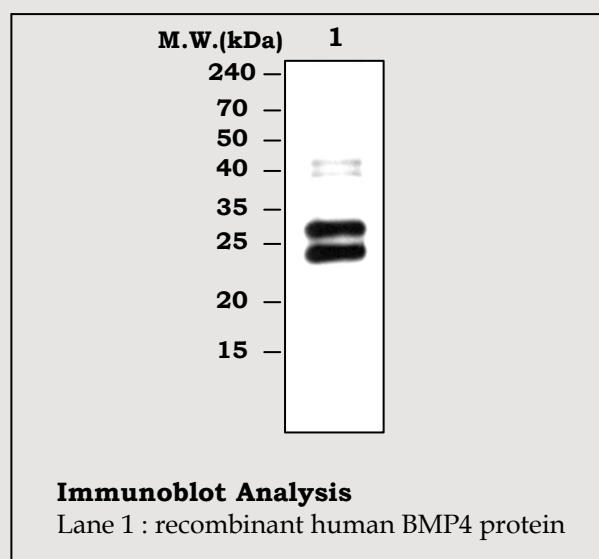
**Size :** 100  $\mu$ l

**Positive control :** Recombinant Human BMP4 protein

**Storage :** Store for 1 year at  $-20^{\circ}\text{C}$  from date of shipment

### Species cross reactivity

Human	Mouse	Rat
+	+	N/T



### Applications :

Western Blotting (1:2,000)

### Background Reference :

- 1) Chang KH et al., 2007, Circulation. 116:1258-1266
- 2) Sadlon TJ et al., 2004, Stem Cells. 22(4):457-474
- 3) Maas R and Bei M, 1997, Crit Rev Oral Biol Med. 8(1):4-39.