



## Anti-BMP6 polyclonal antibody [Biotin] (DPABY-594)

This product is for research use only and is not intended for diagnostic use.

## **PRODUCT INFORMATION**

Antigen Description	BMPs are secreted signaling molecules that comprise a subfamily of the TGF-beta superfamily and were originally identified as regulators of cartilage and bone formation. There are at least 20 structurally and functionally related BMPs, most of which play roles in embryogenesis and morphogenesis of various tissues and organs. Biologically active BMPs are usually homodimers containing a characteristic cysteine knot structure. Heterodimers, BMP-2/BMP-7 and BMP-4/BMP-7 have also been suggested to exist and function in vivo. They are more potent inducers of bone formation than their respective homodimers. In addition, heterodimers, but not homodimers, are ventral mesoderm inducers. Heterodimer activity may be mediated by a different or additional receptor subtype. Decapentaplegic (Dpp) is one of at least five TGF-beta superfamily ligands identified in the Drosophila genome. Dpp, a functional ortholog of mammalian BMP-2 and BMP-4, is a morphogen and plays an essential role in Drosophila development. Dpp regulates embryonic dorsal-ventral polarity and is required for gut morphogenesis and outgrowth and patterning of imaginal disks.
Specificity	Detects human BMP-6 in ELISAs and Western blots. In sandwich immunoassays,less than 4% cross-reactivity with recombinant human (rh) BMP-5 is observed and less than 0.5% cross-reactivity with rhBMP-2, rhBMP-4, rhBMP-7, rhBMP-8, rhTGF-beta 1, rhTGF-beta 2, and rhTGF-beta 3 is observed.
Immunogen	E. coli-derived recombinant human BMP-6 . Gln382-His513 Accession Number P22004
Isotype	IgG
Source/Host	Goat
Species Reactivity	Human
Purification	Antigen Affinity-purified
Conjugate	Biotin

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Applications	Western Blot, ELISA Detection (Matched Pair)
Format	Liquid
Size	50 μg
Buffer	Lyophilized from a 0.2 $\mu$ m filtered solution in PBS with BSA as a carrier protein.
Preservative	None
Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles.
	12 months from date of receipt, -20 to -70 °C as supplied.
	1 month, 2 to 8 °C under sterile conditions after reconstitution.
	6 months, -20 to -70 °C under sterile conditions after reconstitution.

## **GENE INFORMATION**

Gene Name	BMP6 bone morphogenetic protein 6 [ Homo sapiens (human) ]
Official Symbol	BMP6
Synonyms	BMP6; bone morphogenetic protein 6; VGR; VGR1; BMP-6; VGR-1; VG-1-R; VG-1-related protein; Vg1-related sequence; vegetal-related (TGFB related) cytokine; vegetal related growth factor (TGFB-related);
Entrez Gene ID	654
Protein Refseq	NP 001709
UniProt ID	<u>P22004</u>
Chromosome Location	6p24-p23
Pathway	BMP receptor signaling; Endochondral Ossification; Hippo signaling pathway; Id Signaling Pathway; Ovarian steroidogenesis; TGF-beta signaling pathway;
Function	BMP receptor binding; cytokine activity; growth factor activity; protein heterodimerization activity;