



Anti-BMP2 polyclonal antibody (CPBT-65017RH)

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

PRODUCT INFORMATION

Product Overview

Rabbit anti Human BMP-2 antibody recognizes the disulphide-linked homodimeric cysteine knot protein known as human Bone Morphogenetic Protein 2 (BMP-2/BMP-2a), full-length 396 amino acids. BMP-2 is a member of the Transforming Growth Factor beta (TGF-B) superfamily and one of a growing number of osteogenic proteins shown to induce bone and cartilage formation and to play an important role in developmental processes, including cell proliferation, differentiation, apoptosis and morphogenesis. BMPs act through binding with a receptor complex consisting of type I and type II serine/threonine kinases, resulting ultimately in the activation of the Smad protein and mitogen- activated protein kinase (MAPK) signaling pathways. Several antagonist proteins, including, noggin, chordin, gremlin and follistatin, are responsible for modulating the signaling effects of BMPs, through the binding and blocking of receptor ligands, thereby preventing activation. The realization that BMP-2 was involved in the stimulation of bone formation emerged from research in spinal surgery, following the discovery that the healing of bones was directed by proteins contained within the bone matrix itself.

ELISA This purified human BMP-2antibody may be used in an indirect ELISA or as the capture reagent in a sandwich ELISA with our biotinylated human BMP-2 antibody (B) as the detection reagent. **Western Blotting** This antibody may be used in Western Blotting under either reducing or non-reducing conditions.

Specificity	BMP2
Isotype	IgG
Source/Host	Rabbit
Species Reactivity	Human
Conjugate	Unconjugated
Applications	ELISA; IF; IHC-P; WB

Format	Purified IgG - liquid
Size	50 µg
Preservative	See individual product datasheet
Storage	in frost-free freezers is not recommended. This product should be stored undiluted. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

GENE INFORMATION

Gene Name	BMP2 bone morphogenetic protein 2 [Homo sapiens (human)]
Official Symbol	BMP2
Synonyms	BMP2; bone morphogenetic protein 2; BDA2; BMP2A; BMP-2A; bone morphogenetic protein 2A;
Entrez Gene ID	650
Protein Refseq	NP_001191
UniProt ID	P12643
Chromosome Location	20p12
Pathway	Adipogenesis; BDNF signaling pathway; BMP signaling; BMP signalling and regulation; Basal cell carcinoma; Cytokine-cytokine receptor interaction; Elastic fibre formation; Extracellular matrix organization;
Function	BMP receptor binding; SMAD binding; cytokine activity; growth factor activity; phosphatase activator activity; protein binding; protein heterodimerization activity; receptor binding; retinol dehydrogenase activity; transforming growth factor beta receptor binding;