

Rabbit Anti-BMP1 antibody

SL6401R

Product Name:	BMP1
Chinese Name:	骨形态发生蛋白1/胶原C蛋白肽链内切酶抗体
Alias:	BMP 1; BMP-1; Bone morphogenetic protein 1; Mammalian tolloid protein; mTld; PCOLC; PCP; ProCollagen C endopeptidase; Procollagen C proteinase; TLD; BMP1_HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Dog,Pig,Cow,Horse,Rabbit,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100- 500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	98kDa
Cellular localization:	cytoplasmicExtracellular matrixSecretory protein
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human BMP1:901-986/986
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	Bone morphogenetic protein 1 (BMP1) was first identified in osteogenic extracts of bone. It is an extracellular zinc endopeptidase, implicated in morphogenetic processes in a broad range of species. BMP1 is a member of the astacin family of metalloproteinases. The astacin family includes BMP1, astacin, meprin A and B, tolloid-like proteins, and choriolysin. BMP1 is involved in extracellular matrix (ECM) formation, suggesting that

a functional link may exist between astacin metalloproteinases, growth factors, and cell differentiation and pattern formation during development. The name PCP reflects this enzyme's involvement in the collagen deposition of growing bone. The enzymes known as the procollagen C and N proteinases (PCP and PNP) are involved in the processing of fibrillar procollagen precursors to mature collagens, which is an essential requirement for fibril formation. PCP cleaves the C-terminus from procollagen, to allow the formation of mature, triplehelical collagen. The N-terminus is cleaved by the procollagen N-proteinase (PNP or ADAM-TS2). Defects in PNP have been linked to the skin disorder dermatosparaxis, and defects in BMP1 are thought to lead to aberrant collagen processing, and connective tissue disorders. Many forms of BMP1 have been reported, with varying truncation at the C-terminus. The long form of BMP1 is most similar to the tolloid-like proteins, which have extra EGF-like and CUB domains.

Function:

Cleaves the C-terminal propeptides of procollagen I, II and III. Induces cartilage and bone formation. May participate in dorsoventral patterning during early development by cleaving chordin (CHRD).

Tissue Specificity: Ubiquitous.

Similarity:

Belongs to the peptidase M12A family. Contains 5 CUB domains. Contains 2 EGF-like domains.

SWISS: P13497

Gene ID: 649

Database links:

Entrez Gene: 649Human

Entrez Gene: 12153Mouse

Entrez Gene: 83470Rat

Omim: 112264Human

SwissProt: P13497Human

SwissProt: P98063Mouse

Unigene: 1274Human

Unigene: 27757Mouse







