

Bmp1 Antibody (C-term)
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP1712a**Specification**

Bmp1 Antibody (C-term) - Product Information

Application	WB, IHC-P,E
Primary Accession	P13497
Other Accession	P98063
Reactivity	Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Antigen Region	957-986

Bmp1 Antibody (C-term) - Additional Information**Gene ID** 649**Other Names**

Bone morphogenetic protein 1, BMP-1, Mammalian tolloid protein, mTld, Procollagen C-proteinase, PCP, BMP1, PCOLC

Target/Specificity

This Bmp1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 957-986 amino acids from the C-terminal region of human Bmp1.

DilutionWB~~1:1000
IHC-P~~1:50~100**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Bmp1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Bmp1 Antibody (C-term) - Protein Information**Name** BMP1**Synonyms** PCOLC

Function Metalloprotease that plays key roles in regulating the formation of the extracellular matrix (ECM) via processing of various precursor proteins into mature functional enzymes or structural proteins (PubMed:[33206546](#)). Thereby participates in several developmental and physiological processes such as cartilage and bone formation, muscle growth and homeostasis, wound healing and tissue repair (PubMed:[32636307](#), PubMed:[33169406](#)). Roles in ECM formation include cleavage of the C-terminal propeptides from procollagens such as procollagen I, II and III or the proteolytic activation of the enzyme lysyl oxidase LOX, necessary to formation of covalent cross- links in collagen and elastic fibers (PubMed:[31152061](#), PubMed:[33206546](#)). Additional substrates include matricellular thrombospondin-1/THBS1 whose cleavage leads to cell adhesion disruption and TGF-beta activation (PubMed:[32636307](#)).

Cellular Location

Golgi apparatus, trans-Golgi network. Secreted, extracellular space, extracellular matrix. Secreted. Note=Co-localizes with POSTN in the Golgi.

Tissue Location

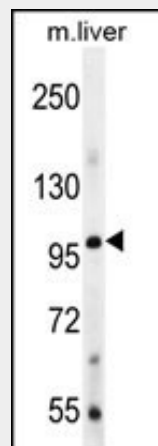
Ubiquitous.

Bmp1 Antibody (C-term) - Protocols

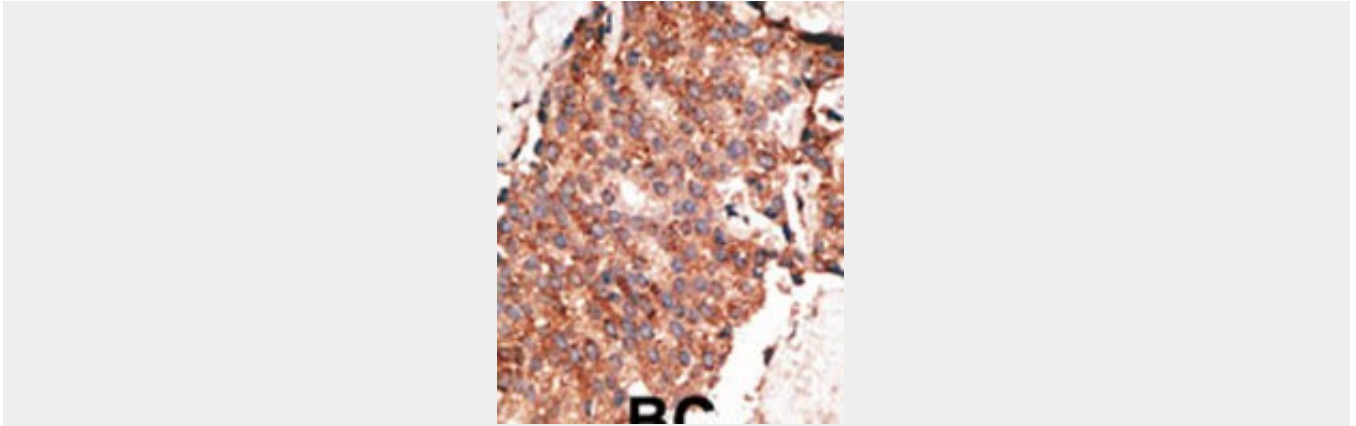
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Bmp1 Antibody (C-term) - Images



Bmp1 Antibody (R972) (Cat. #AP1712a) western blot analysis in mouse liver tissue lysates (35ug/lane). This demonstrates the Bmp1 antibody detected the Bmp1 protein (arrow).



Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by AEC staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.

Bmp1 Antibody (C-term) - Background

The BMP1 locus encodes a protein that is capable of inducing formation of cartilage in vivo. Although other bone morphogenetic proteins are members of the TGF-beta superfamily, BMP1 encodes a protein that is not closely related to other known growth factors. BMP1 protein and procollagen C proteinase (PCP), a secreted metalloprotease requiring calcium and needed for cartilage and bone formation, are identical. PCP or BMP1 protein cleaves the C-terminal propeptides of procollagen I, II, and III and its activity is increased by the procollagen C-endopeptidase enhancer protein. The BMP1 gene is expressed as alternatively spliced variants that share an N-terminal protease domain but differ in their C-terminal region.

Bmp1 Antibody (C-term) - References

Leighton, M., et al., J. Biol. Chem. 278(20):18478-18484 (2003).
Hartigan, N., et al., J. Biol. Chem. 278(20):18045-18049 (2003).
Garrigue-Antar, L., et al., J. Biol. Chem. 277(45):43327-43334 (2002).
Rattenholl, A., et al., J. Biol. Chem. 277(29):26372-26378 (2002).
Janitz, M., et al., J. Mol. Med. 76(2):141-146 (1998).

Bmp1 Antibody (C-term) - Citations

- [Secretomes reveal several novel proteins as well as TGF- \$\beta\$ 1 as the top upstream regulator of metastatic process in breast cancer.](#)