

Bmp1 Antibody (C-term) Blocking Peptide
Synthetic peptide
Catalog # BP1712a**Specification**

Bmp1 Antibody (C-term) Blocking Peptide - Product InformationPrimary Accession [P13497](#)**Bmp1 Antibody (C-term) Blocking Peptide - 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

The synthetic peptide sequence used to generate the antibody [AP1712a](/product/products/AP1712a) was selected from the C-term region of human Bmp1. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

Bmp1 Antibody (C-term) Blocking Peptide - 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](http://www.uniprot.org/citations/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: [33169406](http://www.uniprot.org/citations/33169406), PubMed: [32636307](http://www.uniprot.org/citations/32636307)). 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) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

Bmp1 Antibody (C-term) Blocking Peptide - Images

Bmp1 Antibody (C-term) Blocking Peptide - 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) Blocking Peptide - 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).