

Bmp3 Antibody (N-term) Blocking Peptide
Synthetic peptide
Catalog # BP1714a**Specification**

Bmp3 Antibody (N-term) Blocking Peptide - Product InformationPrimary Accession [P12645](#)**Bmp3 Antibody (N-term) Blocking Peptide - Additional Information****Gene ID** 651**Other Names**

Bone morphogenetic protein 3, BMP-3, Bone morphogenetic protein 3A, BMP-3A, Osteogenin, BMP3, BMP3A

Target/Specificity

The synthetic peptide sequence used to generate the antibody [AP1714a](/product/products/AP1714a) was selected from the N-term region of human Bmp3 . 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.

Bmp3 Antibody (N-term) Blocking Peptide - Protein Information**Name** BMP3**Synonyms** BMP3A**Function**

Growth factor of the TGF-beta superfamily that plays an essential role in developmental process by inducing and patterning early skeletal formation and by negatively regulating bone density. Antagonizes the ability of certain osteogenic BMPs to induce osteoprogenitor differentiation and ossification (PubMed: [11138004](http://www.uniprot.org/citations/11138004), PubMed: [15269709](http://www.uniprot.org/citations/15269709)). Initiates signaling cascades by associating with type II receptor ACVR2B to activate SMAD2-dependent and SMAD-independent signaling cascades including TAK1 and JNK pathways (PubMed: [31665064](http://www.uniprot.org/citations/31665064)).

Cellular Location
Secreted.

Tissue Location
Expressed in adult and fetal cartilage.

Bmp3 Antibody (N-term) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

Bmp3 Antibody (N-term) Blocking Peptide - Images

Bmp3 Antibody (N-term) Blocking Peptide - Background

The BMPs belong to the TGF-Beta superfamily. BMPs stimulate the production of bone matrix proteins and thereby alter stromal cell and osteoclast proliferation, a key step in bone marrow development. In addition to promoting ectopic bone and cartilage development, BMPs regulate the growth, differentiation, chemotaxis, proliferation, and apoptosis of various cell types, including mesenchymal cells, epithelial cells, hematopoietic cells, and neuronal cells. BMPs also play a role in dorsal/ventral patterning. BMP3, highly expressed in lung, ovary and small intestine, participates in cartilage and bone formation. BMP3 and BMP2 genes map to conserved regions between human and mouse.

Bmp3 Antibody (N-term) Blocking Peptide - References

Jin, Y., et al., *Histol. Histopathol.* 16(4):1013-1019 (2001). Tabas, J.A., et al., *Genomics* 9(2):283-289 (1991). Dickinson, M.E., et al., *Genomics* 6(3):505-520 (1990). Wozney, J.M., et al., *Science* 242(4885):1528-1534 (1988).