

# BMP-5 Blocking Peptide

Catalog # PBV10501b

### Specification

## **BMP-5 Blocking Peptide - Product Information**

Primary Accession	<u>P22003</u>
Gene ID	653
Calculated MW	51737

### **BMP-5 Blocking Peptide - Additional Information**

Gene ID 653

Application & Usage

The peptide is used for blocking the antibody activity of BMP-5 Peptide. It usually blocks the antibody activity completely in Western blot analysis by incubating the peptide with equal volume of antibody for 30-60 minutes at 37°C.

**Other Names** Bone morphogenetic protein 5, BMP-5, BMP5

Target/Specificity BMP-5

Formulation 50  $\mu$ g (0.5 mg/ml) in phosphate buffered saline (PBS), pH 7.2, containing 50% glycerol, 1% BSA and 0.02% thimerosal.

Reconstitution & Storage -20 °C

**Background Descriptions** 

**Precautions** BMP-5 Blocking Peptide is for research use only and not for use in diagnostic or therapeutic procedures.

### **BMP-5 Blocking Peptide - Protein Information**

Name BMP5

#### Function

Growth factor of the TGF-beta superfamily that plays essential roles in many developmental processes, including cartilage and bone formation or neurogenesis (PubMed:<a href="http://www.uniprot.org/citations/11580864" target="\_blank">11580864</a>, PubMed:<a href="http://www.uniprot.org/citations/29321139" target="\_blank">29321139</a>). Initiates the



canonical BMP signaling cascade by associating with type I receptor BMPR1A and type II receptor BMPR2 (PubMed:<a href="http://www.uniprot.org/citations/11580864"

target="\_blank">11580864</a>). In turn, BMPR1A propagates signal by phosphorylating SMAD1/5/8 that travel to the nucleus and act as activators and repressors of transcription of target genes (PubMed:<a href="http://www.uniprot.org/citations/29321139"

target="\_blank">29321139</a>, PubMed:<a href="http://www.uniprot.org/citations/11580864" target="\_blank">11580864</a>). Can also signal through non-canonical pathway such as MAPK p38 signaling cascade to promote chondrogenic differentiation (PubMed:<a href="http://www.uniprot.org/citations/20402566" target="\_blank">20402566</a>). Promotes the expression of HAMP, this is repressed by its interaction with ERFE (PubMed:<a href="http://www.uniprot.org/citations/30097509" target=" blank">30097509</a>).

Cellular Location Secreted.

**Tissue Location** Expressed in the lung and liver.

### BMP-5 Blocking Peptide - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

**BMP-5 Blocking Peptide - Images**