

**BMP-14 Blocking Peptide**  
**Catalog # PBV10494b****Specification**

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**BMP-14 Blocking Peptide - Product Information**

Primary Accession	<a href="#">P43026</a>
Other Accession	<a href="#">EAW76208</a>
Gene ID	<b>8200</b>
Calculated MW	<b>55395</b>

**BMP-14 Blocking Peptide - Additional Information****Gene ID** 8200**Application & Usage**

**The peptide is used for blocking the antibody activity of active BMP-14. It usually blocks the antibody activity completely in Western blot analysis by incubating the peptide with equal volume of antibody for 30 minutes at 37°C**

**Other Names**

Growth/differentiation factor 5, GDF-5, Bone morphogenetic protein 14, BMP-14, Cartilage-derived morphogenetic protein 1, CDMP-1, Lipopolysaccharide-associated protein 4, LAP-4, LPS-associated protein 4, Radotermin, GDF5, BMP14, CDMP1

**Target/Specificity**

BMP-14

**Formulation**

50 µg (0.2 mg/ml) in phosphate buffered saline (PBS), pH 7.2, containing 0.1% BSA and 0.02% thimerosal.

**Reconstitution & Storage**

-20 °C

**Background Descriptions****Precautions**

BMP-14 Blocking Peptide is for research use only and not for use in diagnostic or therapeutic procedures.

**BMP-14 Blocking Peptide - Protein Information****Name** GDF5**Synonyms** BMP14, CDMP1

**Function**

Growth factor involved in bone and cartilage formation. During cartilage development regulates differentiation of chondrogenic tissue through two pathways. Firstly, positively regulates differentiation of chondrogenic tissue through its binding of high affinity with BMPR1B and of less affinity with BMPR1A, leading to induction of SMAD1-SMAD5-SMAD8 complex phosphorylation and then SMAD protein signaling transduction (PubMed:<a href="http://www.uniprot.org/citations/24098149" target="\_blank">24098149</a>, PubMed:<a href="http://www.uniprot.org/citations/21976273" target="\_blank">21976273</a>, PubMed:<a href="http://www.uniprot.org/citations/15530414" target="\_blank">15530414</a>, PubMed:<a href="http://www.uniprot.org/citations/25092592" target="\_blank">25092592</a>). Secondly, negatively regulates chondrogenic differentiation through its interaction with NOG (PubMed:<a href="http://www.uniprot.org/citations/21976273" target="\_blank">21976273</a>). Required to prevent excessive muscle loss upon denervation. This function requires SMAD4 and is mediated by phosphorylated SMAD1/5/8 (By similarity). Binds bacterial lipopolysaccharide (LPS) and mediates LPS-induced inflammatory response, including TNF secretion by monocytes (PubMed:<a href="http://www.uniprot.org/citations/11276205" target="\_blank">11276205</a>).

**Cellular Location**

Secreted. Cell membrane

**Tissue Location**

Predominantly expressed in long bones during embryonic development. Expressed in monocytes (at protein level)

**BMP-14 Blocking Peptide - 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](#)

**BMP-14 Blocking Peptide - Images**