10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

BMP-14 Blocking Peptide

Catalog # PBV10494b

Specification

BMP-14 Blocking Peptide - Product Information

Primary Accession	P43026
Other Accession	EAW76208
Gene ID	8200
Calculated MW	55395

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:24098149, PubMed:21976273, PubMed:15530414, PubMed:25092592). Secondly, negatively regulates chondrogenic differentiation through its interaction with NOG (PubMed:21976273). 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:11276205).

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 Cytomety
- Cell Culture

BMP-14 Blocking Peptide - Images