Bone Morphogenetic Protein-4 Human E. coli

Product Data Sheet

Type: Recombinant
Source: E. coli
Species: Human
Other names: BMP-4

Cat. No.:

RBG10085001	(1 µg)
RBG10085005	(5 µg)
RBG10085100	(100 µg)

Description

Bone morphogenetic proteins (BMPs) constitute a subfamily within the TGF-beta superfamily of structurally related signaling proteins. Members of this superfamily are widely distributed throughout the body, and are involved in diverse physiological processes during both pre- and postnatal life. Like BMP-7, BMP-4 is involved in the development and maintenance of bone and cartilage. Reduced expression of BMP-4 is associated with a number of bone diseases, including the heritable disorder Fibrodysplasia Ossificans Progressiva. PeproTech's E.coli-derived BMP-4 is a fully active homodimeric protein consisting of two 106 amino acid subunits, which correspond to amino acids 303-408 of the full length BMP-4 precursor. The calculated molecular weight of Recombinant Human BMP-4 (E.coli-derived) is 23.9 kDa. Manufactured using all Animal-Free reagents.

Research topic

Bone and cartilage metabolism

Amino Acid Sequence

KKNKNCRRHS LYVDFSDVGW NDWIVAPPGY QAFYCHGDCP FPLADHLNST NHAIVQTLVN SVNSSIPKAC CVPTELSAIS MLYLDEYDKV VLKNYQEMVV EGCGCR

Source

E. coli

Purity

98%

Biological Activity

Determined by its ability to induce alkaline phosphatase production by ATDC-5 cells. The expected ED_{50} for this effect is 5-10 ng/ml.

Endotoxin

Endotoxin level is <0.1 ng/µg of protein (<1EU/µg).

Reconstitution

Centrifuge the vial prior to opening. Reconstitute in 5mM HCl, pH 3.0 to a concentration of 0.1-1.0 mg/ml. Do not vortex. For extended storage, it is recommended to further dilute in a buffer containing a carrier protein (example 0.1% BSA) and store in working aliquots at -20°C to -80°C.

Storage, Stability/Shelf Life

-20°C

HEADQUARTERS: BioVendor Laboratorní medicína, a.s.	Karasek 1767/1	621 00 Brno CZECH REPUBLIC	Phone: +420-549-124-185 Fax: +420-549-211-460	E-mail: Web:	info@biovendor.com sales@biovendor.com www.biovendor.com
AUSTRIA: BioVendor GesmbH	Nußdorfer Straße 20/10	1090 Vienna AUSTRIA	Phone: +43-1-89090-25 Fax: +43-1-89090-2515	E-mail:	infoAustria@biovendor.com
GERMANY, SWITZERLAND: BioVendor GmbH	Otto-Hahn-Straße 16	34123 Kassel GERMANY	Phone: +49-6221-433-9100 Fax: +49-6221-433-9111	E-mail:	infoEU@biovendor.com
USA, CANADA AND MEXICO: BioVendor LLC	128 Bingham Rd. Suite 1300	Asheville, NC 28806 USA	Phone: +1-828-575-9250 +1-800-404-7807 Fax: +1-828-575-9251	E-mail:	infoUSA@biovendor.com