

Recombinant Human BMP-6 protein(His Tag)

Catalog Number: PKSH034132

Note: Centrifuge before opening to ensure complete recovery of vial contents.

Description

Species	Human
Source	E.coli-derived Human BMP-6 protein Val 397-His 513 , with an C-terminal His
Mol_Mass	14.1 kDa
Accession	P22004
Bio-activity	Measure by its ability to induce alkaline phosphatase production by ATDC5 cells.The ED ₅₀ for this effect is <87 ng/mL.

Properties

Purity	> 98 % as determined by reducing SDS-PAGE.
Endotoxin	< 0.1 EU per µg of the protein as determined by the LAL method.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80 °C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from sterile PBS, pH 8.0. Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Background

Growth factor of the TGF-beta superfamily that plays essential roles in many developmental processes including cartilage and bone formation. Also plays an important role in the regulation of hepcidin/HAMP expression and iron metabolism by acting as a ligand for hemojuvelin/HJV. Initiates the canonical BMP signaling cascade by associating with type I receptor ACVR1 and type II receptor ACVR2B. In turn, ACVR1 propagates signal by phosphorylating SMAD1/5/8 that travel to the nucleus and act as activators and repressors of transcription of target. Can also signal through non-canonical pathway such as TAZ-Hippo signaling cascade to modulate VEGF signaling by regulating VEGFR2 expression.