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
Calculated MW	14.1 kDa
Observed MW	13 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 $< -20^{\circ}$ 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	

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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.