

BMP-7, Human, Recombinant

Cat. No. : PCK372

General Information

Synonyms	bone morphogenetic protein 7, Osteogenic Protein-1 (OP-1), BMP7
Species	Human
Expression host	E.coli
Sequence	MANVAENSSSDQRQACKKHELYVSFRDLGWQDWIIAPEGYAAYYCEGECAPFLNSYMNATNH AIVQTLVHFINPETVPKPCCAPTQLNAISVLYFDDSSNVILKKYRNMVVRACGCH with polyhistidine tag at the C-terminus.
Accession	P18075
Tag	His Tag (C-term)
Mol mass	14.00 kDa
Expiration date	12 months
Bio activity	Measure by its ability to induce alkaline phosphatase production by ATDC5 cells. The ED50 for this effect is < 0.65 µg/mL.

Product feature

Purity	>95% as determined by SDS-PAGE. Ni-NTA chromatography.
Endotoxin (EU/µg)	< 0.1
Storage	Lyophilized protein should be stored at -5~-20°C for 1 year. Upon reconstitution, store at 2-8°C for up to 1 week. Further dilute in a buffer containing a carrier protein or stabilizer (e.g. 0.1% BSA, 10% FBS, 5% HSA or 5% trehalose solution), protein aliquots should be stored at -5~-20°C or -80°C for 3-6 months.
Shipping	Ice bag
Formulation	The protein was lyophilized from a 0.2 µm filtered solution containing 1× PBS, pH8.0.
Reconstitution	It is recommended to reconstitute the lyophilized protein in sterile water to a concentration not less than 100 µg/mL. Do Not Vortex! Vigorous shaking may impair the biological activity of the protein.

Background

Bone Morphogenetic Protein-7 (BMP-7) is an extracellular multifunctional cytokine that is also a member of the TGF-β family. BMP7 can significantly inhibit TGF-β through binding with TGF-β receptor and trigger SMAD transcription factors, such as SMAD 1/5/8. It plays a vital role in inhibiting the expansion of kidney damage and promoting the differentiation of osteoblasts.

SDS-PAGE

