


Human BMP-7 Protein

Cat #: PRP1946

Size: 5 µg/20 µg/100 µg /1 mg

Product Information

	Product Name: Human BMP-7 Protein		
REF	Catalog Number: PRP1946	LOT	Lot Number: Refer to product label
	Purity: > 98 % as determined by SDS-PAGE		
	Storage: Store at -20°C		Preparation method: <i>E.coli</i>
	Shipping: The product is shipped at ambient temperature.		

Background: Bone morphogenetic protein 7 (BMP-7) is a multifunctional ligand protein belongs to the TGF- β family. BMP-7 is involved in regulating the proliferation, invasion, and migration of cancer cells, and is associated with various human tumors. BMP-7 binds to ALK2 or ACVR2A/BMPRII excitation signals, which are regulated and terminated by SMADs. BMP-7 is involved in the BMP-7 Smad1/5/9 signaling pathway and is associated with the epithelial mesenchymal transition (EMT) process. The growth factor domain of human BMP-7 shares 98% aa sequence identity with mouse and rat BMP-7.

Sequence: Amino acid sequence derived from Human BMP-7 (Met315-His431) (P18075) was expressed.

Protein length: The Human BMP-7 Protein consists of 117 amino acids and predicts a molecular mass of 13.2 kDa.

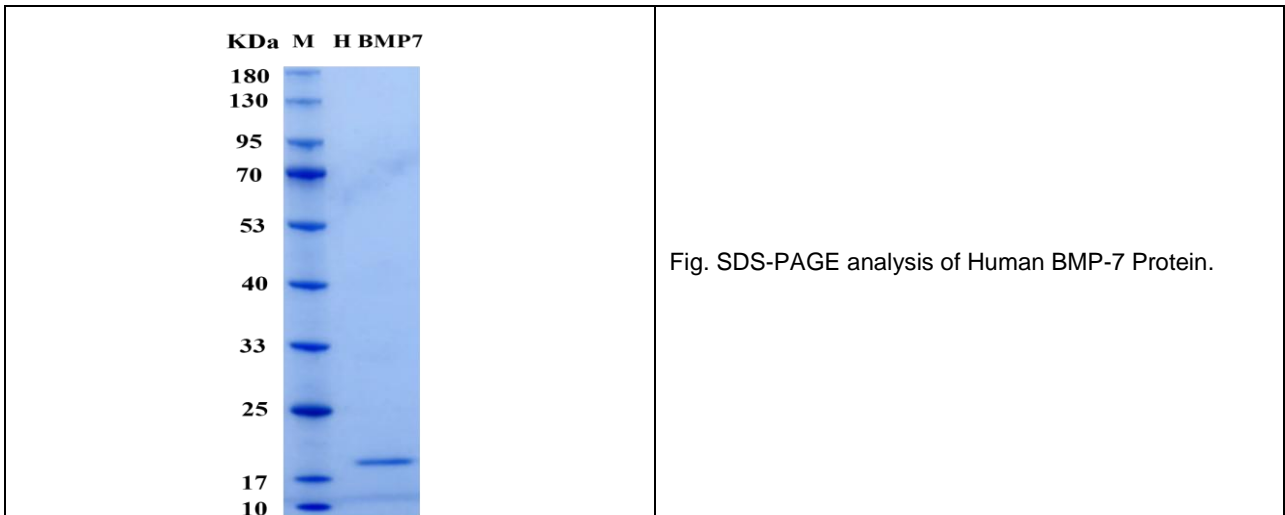
Biological Activity: Testing in Progress.

Endotoxin: <0.1 EU per µg of the protein by the LAL method.

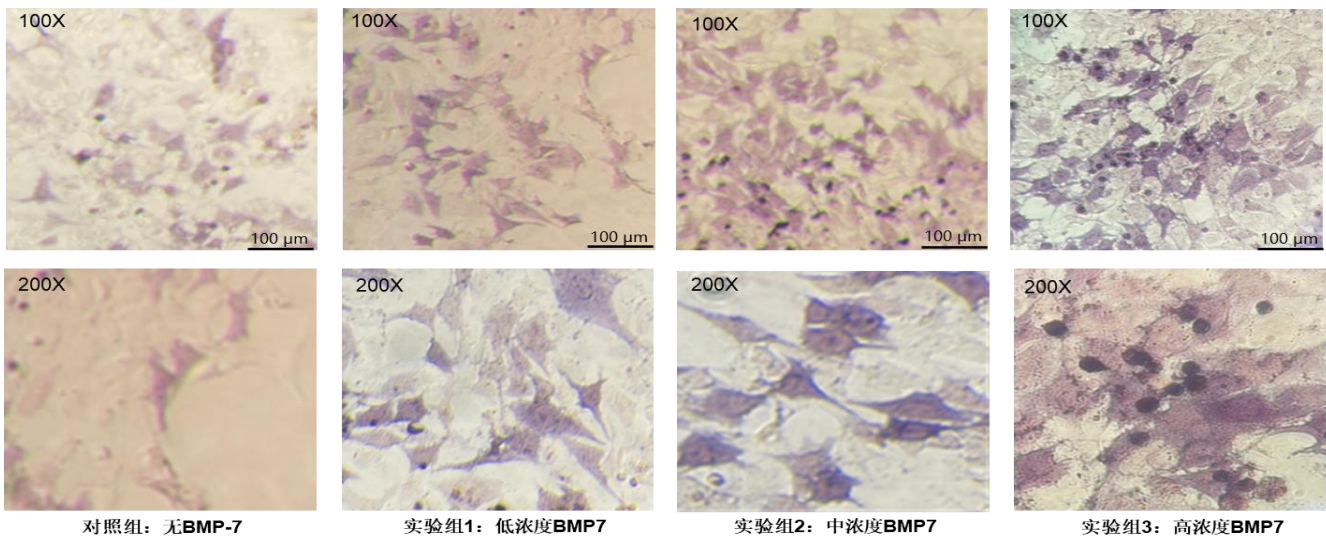
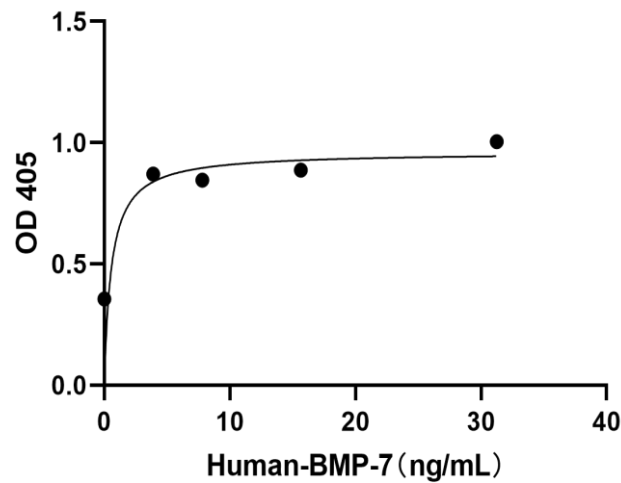
Formulation: Lyophilized from 20 mM Tris-HCl, 150 mM NaCl, pH 7.4.

Storage Instructions: Lyophilized protein product should be stored desiccated below -20°C. Upon reconstitution, the protein should be stored at 4°C between 2-7 days and for future use below -20°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

Usage notes: Always centrifuge tubes before opening. It is recommended to reconstitute the lyophilized protein using the buffer we provided not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.



Biological Activity: Measure by its ability to induce alkaline phosphatase production by ATDC5 cells. The ED_{50} for this effect is <5 ng/mL. As shown in the figure below, the number of positive cells increased as the concentration of BMP7 protein was added, and this effect was measured by the TRAP kit.



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