


## Human BMP-7 Protein, His tag (Animal-Free)

Cat #: PRP1199

Size: 5 µg/20 µg/100 µg/1 mg

### Product Information

	<b>Product Name:</b> Human BMP-7 Protein, His tag (Animal-Free)		
<b>REF</b>	<b>Catalog Number:</b> PRP1199	<b>LOT</b>	<b>Lot Number:</b> Refer to product label
	<b>Purity:</b> > 95 % as determined by SDS-PAGE		
	<b>Storage:</b> Store at -20°C		<b>Preparation method:</b> E.coli
	<b>Shipping:</b> The product is shipped at ambient temperature.		

**Background:** Bone morphogenetic protein 7 (BMP-7) is TGF-β Members of the superfamily, expressed in the brain, kidneys, and bladder. It plays a crucial role in the transformation of mesenchymal cells into bones and cartilage. BMP-7 induces phosphorylation of SMAD1 and SMAD5, which in turn can induce transcription of osteogenic genes. In many types of cells, BMP-7 treatment is sufficient to induce all genetic markers of osteoblast differentiation. BMP-7 may have the potential to treat chronic kidney disease. BMP-7 injection may be a treatment option for infertility with poor FSH treatment efficacy. BMP-7 may also be used for the treatment of human obesity.

**Sequence:** Amino acid sequence derived from Human BMP-7 (Met 315-His 431) (P18075) was expressed with 6×His tag at the C-terminus.

**Protein length:** The recombinant Human BMP-7 consists of 117 amino acids and predicts a molecular mass of 14.00 kDa.

**Biological Activity:** Measured by its ability to induce alkaline phosphatase production by ATDC5 cells. The ED<sub>50</sub> for this effect is <0.65 µg/mL.

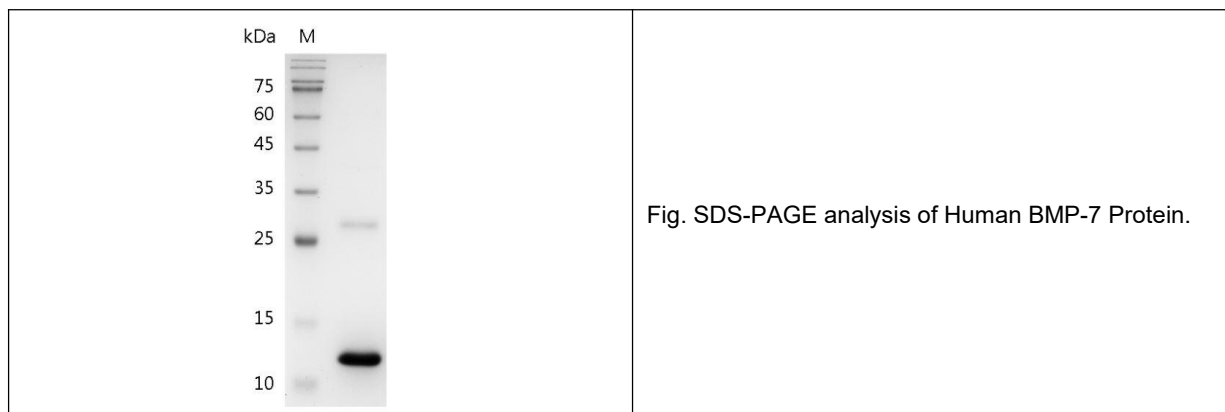
**Endotoxin:** <0.1 EU per 1 µg of the protein by the LAL method.

**Formulation:** Lyophilized from 20 mM sodium citrate, 0.2 M NaCl, pH 3.5.

**Storage Instructions:** Lyophilized protein product should be stored desiccated below -18°C. Upon reconstitution, the protein should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (5% HSA, 10%FBS or 0.1%BSA). Please prevent freeze-thaw cycles.

**Usage notes:** Always centrifuge tubes before opening. It is recommended to reconstitute the lyophilized recombinant protein

to a concentration of 0.1-1 mg/mL using the buffer we provided, and keep at room temperature for at least 20 min to fully dissolve. Please avoid vortex vigorously.



**Note:** The product listed herein is for research use only and is not intended for use in human or clinical diagnosis. Suggested applications of our products are not recommendations to use our products in violation of any patent or as a license. We cannot be responsible for patent infringements or other violations that may occur with the use of this product.