



## HumanKine<sup>®</sup> recombinant human BMP-7 protein

Animal Component-Free

Human cell expressed

Tag-Free

Endotoxin Free

### Product Description

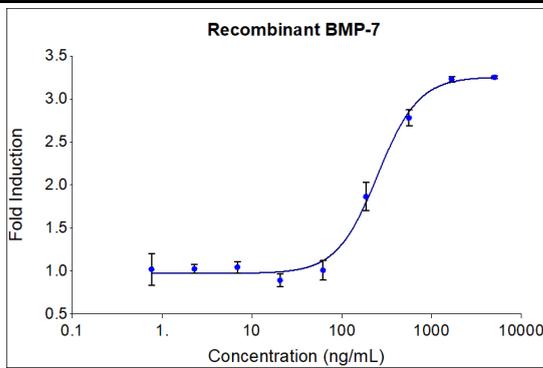
Animal-free Recombinant Human BMP-7 is expressed in human 293 cells as a disulfide linked homodimeric glycoprotein with an apparent molecular mass of 29 kDa. This cytokine is produced in a serum-free, chemically defined media. Recombinant Human BMP-7 is a homodimeric glycoprotein consisting of two 117 amino acid subunits, which correspond to amino acid residues 315 to 431 of the full-length BMP-7 precursor. The protein encoded by this gene is a member of the TGF-beta superfamily. Like other members of the Bone Morphogenetic Protein family of proteins, it plays a key role in the transformation of mesenchymal cells into bone and cartilage.

Alternative Names	BMP 7, BMP7, BMP-7, bone morphogenetic protein 7, Eptotermin alfa, HZ1229, OP 1, OP1, Osteogenic protein 1
Source	Human Embryonic Kidney cells (HEK293). HEK293-derived BMP-7 protein
Species Reactivity	human,mouse

### Specifications

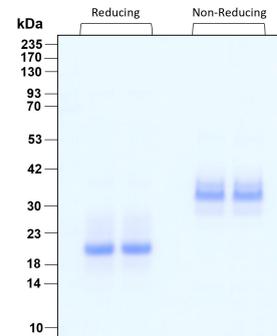
Test	Method	Specification
Activity (EC50)	Dose-dependent induction of alkaline phosphatase production in the ATDC-5 cell line (mouse chondrogenic cell line)	50-275 ng/mL
Molecular Mass	SDS-PAGE	20 kDa reduced, 32 to 36 kDa non-reduced, homodimer, glycosylated
Purity	SDS-PAGE	>95%
Endotoxin	LAL	<1 EU/μg

### Activity Data



Recombinant human BMP-7 (HZ-1229) stimulates dose-dependent induction of alkaline phosphatase production in the ATDC-5 mouse chondrogenic cell line. Alkaline phosphatase production was assessed using pNPP as a chromogenic substrate. ATDC-5 cells were treated with increasing concentrations of recombinant human BMP-7 for 72 hours before lysis and

### SDS-PAGE



Preparation	
Shipping Temperature	ambient temperature
Formulation	10mM Acetic Acid
Reconstitution	Briefly centrifuge the vial before opening. It is recommended to reconstitute the protein to 0.2 mg/mL in 10mM Acetic Acid containing 0.1% endotoxin-free recombinant human serum albumin (HSA). Gently swirl or tap vial to mix.

Stability and Storage	Product Form	Temperature Conditions	Storage Time (From Date of Receipt)
	Lyophilized	-20°C to -80°C	Until Expiry Date
	Lyophilized	Room Temperature	2 weeks
	Reconstituted as per CofA	-20°C to -80°C	6 months
	Reconstituted as per CofA	4°C	1 week
Avoid repeated freeze-thaw cycles.			

[www.ptglab.com](http://www.ptglab.com)

Document #: FR-QA118-101 Rev 0  
Data Sheet Version #: 1

**Proteintech Group, Inc.**  
5500 Pearl Street, Suite 400 Rosemont, IL 60612  
t: 1-888-478-4522; f: 1-312-455-8408  
Email: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)