


CA 1046	<b>HumanKine™ BMP-7</b>			
	<b>Prod. No. S2304-10UG</b>	<b>lot #: PR1XXXXXX XXXX</b>	Orders & Support	866 372-7442 support@primorigen.com
	<i>For Research Use Only Not intended for use in humans or animals</i>		Web	www.primorigen.com

<b>Pack Size</b>	10 µg
<b>Species</b>	Human
<b>Expression System</b>	HEK 293*
	Animal-derived product free
<b>Molecular Mass</b>	30 to 38 kDa homodimer, glycosylated
<b>Activity</b>	Typically 50 to 250 ng/mL
<b>Purity</b>	≥ 95%
<b>Endotoxin</b>	≤ 1 EU/µg

### Background:

Recombinant human BMP-7 expressed in engineered human cells. BMP-7 is a 30 to 38 kDa glycosylated homodimer with a disulfide linkage and belongs to the bone morphogenetic protein family that is a subgroup of the TGF-beta superfamily. BMP-7 is important during embryogenesis especially for skeletal development and induces chondrocyte formation and osteoblast differentiation. BMPs are involved in dorsal-ventral patterning of the embryo and organogenesis.

*Note: Representative data are shown below (not Lot-specific).*

### Formulation:

Lyophilized from a 0.2 micron filtered solution in PBS

### Reconstitution:

Briefly centrifuge the vial before opening. It is recommended to reconstitute the protein in sterile water containing 0.1% endotoxin-free recombinant human serum albumin.

### Storage and Stability:

Lyophilized products are stable for one year at -20°C to -80°C from date of receipt. Store only at -20°C to -80°C in working aliquots. Avoid repeated freeze-thaw cycles.

### Quality Control Testing

#### Assay:

The specific activity was determined by the dose dependent induction of alkaline phosphatase production in the ATDC-5 cell line (Mouse chondrogenic cell line).

#### Purity Confirmation:

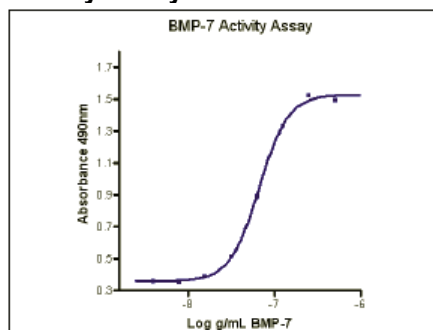
The protein was resolved by SDS-polyacrylamide gel electrophoresis and the gel was stained with Coomassie blue.

#### References:

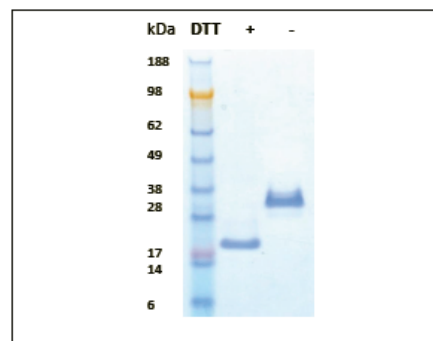
Chen, D., *et al*, (2004) *Growth Factors* 22, 233-241  
Nakamura, K., *et al* (1999) *Exp Cell Research* 250, 351-363

\*All HumanKine™ cytokines are expressed in HEK 293 cells. HumanKine™ is a trademark of HumanZyme Inc.

## A. Activity Assay



## B. SDS-PAGE



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