


CA 1044	HumanKine™ BMP-2			
	Prod. No. S2302-10UG <i>For Research Use Only</i> <i>Not intended for use in humans or animals</i>	lot #: PR1XXXXXX XXXX	Orders & Support Web	866 372-7442 support@primorigen.com www.primorigen.com

Pack Size	10 µg
Species	Human
Expression System	HEK 293*
	Animal-derived product free
Molecular Mass	30 to 38 kDa homodimer, glycosylated
Activity	Typically 20 to 100 ng/mL
Purity	≥ 95%
Endotoxin	≤ 1 EU/µg

Background:

Recombinant human BMP-2 expressed in engineered human cells. BMP-2 belongs to the bone morphogenetic protein family, a subgroup of the TGF-beta superfamily. BMP-2 protein is a 30 to 38 kDa glycosylated homodimer that has a disulfide linkage. BMP-2 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 4mM HCl 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:

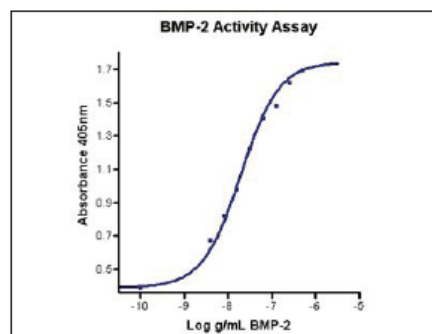
The protein was resolved by SDS-polyacrylamide gel electrophoresis and the gel was stained with Coomassie blue.

References:

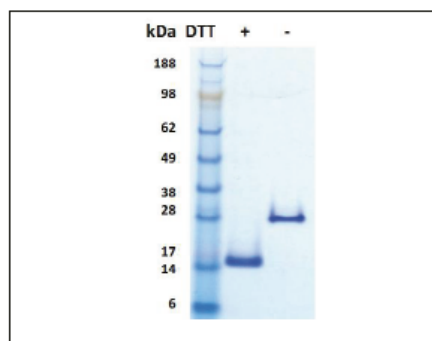
Chen, D., *et al*, (2004) *Growth Factors* 22, 233-241
Nakamura, K., *et al*, (1999) *Exp Cell Research* 250, 351-363

*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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