

# Recombinant Human BMP-2

Cat. #: SB2-010

## Product Specifications

- Expression of Human Proteins in Human Cells
- Extremely Low Endotoxin Level
- High Purity
- Animal Free and Xeno Free
- Tag Free

## Protein Description

Bone morphogenetic protein 2 (BMP-2) is a member of transforming growth factor  $\beta$  family that includes more than 20 structurally related bone growth factors. BMP-2 is expressed abundant in lung, spleen and colon and in low but significant levels in heart, brain, placenta, liver, skeletal muscle, kidney, pancreas, prostate, ovary and small intestine. BMP- 2 plays an important role in inducing bone and cartilage formation. Mature human BMP- 2 is usually a homodimer consisting of two monomers of 114 amino acids. Dimerization is facilitated by a disulfide bridge formed between the monomer, which contains three intrachain disulfide bridges arranged in a cystine knot motif.

## References

Chen D, et al. (2004) Growth Factors 22, 233.  
Wozney JM, et al. (1988) Science 242, 1528-1534.

**Source:** Derived from human cells

**Size:** 10  $\mu$ g

**Shipping:** Ambient temperature

**Structure:** Glycosylated homodimer

**Purity:** >95% by SDS-PAGE

**Endotoxin Level:** <0.5 EU/ $\mu$ g

**Molecular Weight:** 30-38 kDa

**Formulation:** Lyophilized from a 0.2  $\mu$ m filtered solution in PBS without carrier protein

## Activity Assay

Activity was measured by its ability to induce alkaline phosphatase production in the ATDC-5 cell line (mouse chondrogenic cell line).

## Reconstitution

Briefly centrifuge the vial before opening. It is recommended to reconstitute the protein in sterile 4 mM HCl containing at least 0.1% human or bovine serum albumin.

## Stability and Storage

Use a manual defrost freezer and avoid repeated freeze-thaw cycles. In general: 12 months from date of receipt, -20 to -80° C as supplied. 1 month, 2 to 8° C under sterile conditions after reconstitution. 3 months, -20 to -80° C under sterile conditions after reconstitution.

