

Recombinant human BMP-4 (Active, Tag free)

- Cat. Number:** ck0021
- Quantity size:** 10µg / 50ug / 500µg
- Protein Sequence:** 293-408aa, Tag free, full length mature protein
- Swiss-Prot:** P12644
- Gene ID:** 652
- Source:** Human cells derived
- Structure:** Glycosylated monomer
- Purity:** >95% by SDS-PAGE
- MW:** 34-40kDa
- Endotoxin Level:** <0.5EU/ug
- Formulation:** Lyophilized from a 0.2µm filtered solution in PBS without carrier protein
Animal and Xeno free
- Activity Assay:** The 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 PBS containing 0.1% endotoxin-free recombinant human serum albumin.
- Stability & 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.
- Description:** Bone morphogenetic protein 4 (BMP-4) is a member of transforming growth factor β family that includes more than 20 structurally related bone growth factors. BMP-4 is widely expressed from early embryogenesis through adulthood. It plays an important role in cartilage and bone formation, mesoderm induction, tooth development, limb formation and fracture repair. Mature human BMP-4 is a 116 amino acids glycoprotein and normally found as a homodimer. Dimerization is facilitated by a disulfide bridge formed between the monomer, which contains three intrachain disulfide bridges arranged in a cystine knot motif. BMP-4 signals through tetrameric complexes composed of type I (primarily Activin RIA or BMPRIA) and type II (primarily Activin RIIA or BMPRII) receptors. The bioavailability of BMP-4 is regulated by its interaction with multiple proteins and glycosaminoglycans.

Important Note: This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.