Bone Morphogenetic Protein-3B (BMP-3B), Human

Cat.no. PK0185

Product size: 10ug   50ug   1mg
Source: E. coli
Species: Human

Molecular Weight: 25.1 kDa, observed by non-reducing SDS-PAGE.

Formulation: Lyophilized after extensive dialysis against 4mM HCl.

Reconstitution: Reconstituted in 4mM HCl at 100 μg/mL.

Purity: > 95% as analyzed by SDS-PAGE and HPLC.

Endotoxin Level: < 0.2 EU/μg, determined by LAL method.

Storage: Lyophilized recombinant human Bone Morphogenetic Protein-3B (rhBMP-3B) remains stable up to 6 months at lower than -70°C from date of receipt. Upon reconstitution, rhBMP-3B remains stable up to 2 weeks at 4°C or up to 3 months at -20°C.

Description: Bone Morphogenetic Protein-3B (BMP-3B) , also known as Growth/Differentiation Factor 10 (GDF-10), is a cytokine belonging to the Transforming Growth Factor β (TGF-β) superfamily. BMP-3B contains the cystine knot motif shared by other TGF-β family members. BMP-3B was originally identified by PCR based on the BMP-3 sequence, and shares 83% identity with BMP-3. BMP-3B and BMP-2 act as mutual antagonists, as they compete for the availability of signaling protein Smad4. In vivo, BMP-3B is highly expressed in brain, lungs, and bone tissues. The functions of BMP-3B include acting as a dorsaling factor in head development, inhibition of adipogenesis in adipocytes, and induction of bone formation. BMP-3B is down-regulated in lung cancer patient samples, indicating its potential antitumor activity. Recombinant human Bone Morphogenetic Protein-3B (rhBMP-3B) produced in E. coli is a disulfide-linked homodimer containing two non-glycosylated polypeptide chains of 111 amino acids each

Amino Acid Sequence:
00001 MQWDEPRVCS RRYLKVDFAD IGWNEWIISP KSFDAYYCAG
00041 ACEFPMPKIV RPSNHATIQS IVRAVGIIPG IPEPCCVPDK
00081 MNSLGVLFLD ENRNVVLKVY PNMSVDTCAC R

Synonyms: Growth/differentiation factor 10, GDF-10, Bone morphogenetic protein 3B, BMP-3B, Bone-inducing protein, BIP, GDF10, BMP3B

Note： For research use only, not for use in diagnostic procedure.