

32-7709: Recombinant Human Bone Morphogenetic Protein 7(Discontinued)

Gene : BMP7
Gene ID : 655
Uniprot ID : P18075

Description

Source: Human Cells.
MW :15.7kD.

Recombinant Human Bone Morphogenetic Protein 7 is produced by our Mammalian expression system and the target gene encoding Ser293-His431 is expressed. Bone morphogenetic protein 7 (BMP-7) is a widely expressed TGF- beta superfamily member with important functions during embryogenesis, in the adult, and in disease. The BMP-7 propeptide is cleaved intracellularly but remains in association with the growth factor domain. BMP-7 is subsequently secreted as a tetramer that consists of two propeptides and two disulfide-linked growth factor domains. Mature BMP-7 can also form disulfide-linked heterodimers with BMP-2 or BMP-4, complexes that show increased potency and range of activity compared to BMP-7 homodimers. BMP-7 exerts its biological effects through the type 2 receptors Activin RIIA, Activin RIIB, and BMPR-II and the type 1 receptors Activin RIA, BMPR-IA, and BMPR-IB. BMP-7 plays a role in a variety of organ systems. It promotes new bone formation and nephron development, inhibits the branching of prostate epithelium, and antagonizes epithelial-mesenchymal transition (EMT). In pathological conditions, BMP-7 inhibits tumor growth and metastasis, ameliorates fibrotic damage in nephritis, and promotes neuroregeneration following brain ischemia.

Product Info

Amount : 10 µg / 50 µg
Content : Lyophilized from a 0.2 µm filtered solution of 4mM HCl.
Storage condition : Lyophilized protein should be stored at -20°C, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7°C for 2-7 days. Aliquots of reconstituted samples are stable at -20°C for 3 months.
Amino Acid : STGSKQRSQNRSKTPKNQEALRMANVAENSSSDQRQACKKHELYVSFRDLGWQDWIIAPEGYAAYYCEGECA
FPLNSYMNATNHAIVQTLVHFINPETVPKPCAPTQLNAISVLYFDDSSNVILKKYRNMMVVRACGCH

Application Note

Always centrifuge tubes before opening. Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100 µg/ml. Dissolve the lyophilized protein in ddH₂O. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

Endotoxin : Less than 0.1 ng/µg (1 IEU/µg) as determined by LAL test.