

## 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 ddH<sub>2</sub>O. 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.