

## 32-6312: BMP3 Human

**Application :** Functional Assay

**Alternative Name :** Bone Morphogenetic Protein 3, Osteogenin, Bone Morphogenetic Protein 3 (Osteogenic), Bone Morphogenetic Protein 3A, BMP-3A, BMP-3, Bone Morphogenetic Protein-3, BMP3A, BMP3.

### Description

Source: Escherichia Coli.

Sterile Filtered White lyophilized (freeze-dried) powder.

Bone Morphogenetic Protein 3 (BMP3) is one of the BMPs, some of which are members of the TGF-beta superfamily (BMP2-7). There are more than 13 BMPs, which are involved in inducing cartilage and bone formation, embryogenesis and morphogenesis of various tissues and organs. In addition, BMPs regulate the growth, differentiation, chemotaxis, and apoptosis of various cell types. Akin to most other TGF-beta family proteins, BMPs are extremely conserved across animal species. At the amino acid sequence level, mature human and rat BMP3 are 98% identical.

BMP3 Human Recombinant produced in E.coli is a non-glycosylated disulfide linked homodimer containing 2 chains of 110 amino acids and having a molecular mass of 24.8kDa. The BMP-3 is purified by proprietary chromatographic techniques.

### Product Info

**Amount :** 10 µg / 50 µg

**Purification :** Greater than 95.0% as determined by: (a) Analysis by HPLC. (b) Analysis by SDS-PAGE.

BMP-3 protein was lyophilized from a 0.2µm filtered concentrated solution in 30% Acetonitrile and 0.1% TFA.

**Content :** It is recommended to reconstitute the lyophilized BMP3 in sterile 4mM HCl not less than 100µg/ml, which can then be further diluted to other aqueous solutions.

**Storage condition :** Lyophilized BMP3 although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution BMP-3 should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

**Amino Acid :** QWIEPRNCAR RYLKVDFAI GWSEWIISPK SFDAYYCSGA CQFPMPKSLK PSNHATIQSI VRAVGWVPGI PEPCCVPEKM SSSLILFFDE NKNVVLKVYP NMTVESCACR.

### Application Note

The ED50 as determined by its ability to inhibit BMP-2-induced activity in murine MC3T3- E1 cells.