

## 32-6370: GDF5 Mouse

**Application :** Functional Assay

**Alternative Name :** Bmp-14, Bp, GDF-5, Bone morphogenetic protein 14, GDF5, Growth/differentiation factor 5.

### Description

Source: Escherichia Coli.

Sterile Filtered White lyophilized (freeze-dried) powder.

GDF-5 is a member of the bone morphogenetic protein (BMP) family and the TGF-beta superfamily. This group of proteins is characterized by a polybasic proteolytic processing site which is cleaved to produce a mature protein containing seven conserved cysteine residues. The members of this family are regulators of cell growth and differentiation in both embryonic and adult tissues. Mutations in this gene are associated with acromesomelic dysplasia, Hunter-Thompson type; brachydactyly, type C; and chondrodysplasia, Grebe type. These associations confirm that the gene product plays a role in skeletal development.

GDF5 Mouse Recombinant produced in E.coli is a non-glycosylated disulfide linked homodimer containing 2 chains of 120 amino acids and having a molecular mass of 27.2kDa. The GDF-5 is purified by proprietary chromatographic techniques.

### Product Info

**Amount :** 10 µg / 50 µg

**Purification :** Greater than 96.0% as determined by: (a) Analysis by RP-HPLC. (b) Analysis by SDS-PAGE.

GDF-5 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 GDF5 in sterile 4mM HCl not less than 100µg/ml, which can then be further diluted to other aqueous solutions.

**Storage condition :** Lyophilized GDF5 although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution GDF-5 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 :** APLANRQGKR PSKNLKARCS RKALHVNFKD MGWDDWIIAP LEYEAFHCEG LCEFPLRSHL EPTNHAVIQT LMNSMDPEST PPTCCVPTRL SPISILFIDS ANNVVYKQYE DMVVESCGCR.

### Application Note

The ED50 as determined by inducing alkaline phosphatase production of murine ATDC5 cells is less than 1.0Åµg/ml, corresponding to a specific activity of > 1000IU/mg.