

## 32-12084: Human Growth and Differentiation Factor-5

**Gene :** GDF5  
**Gene ID :** 8200  
**Uniprot ID :** P43026  
**Alternative Name :** BMP14, CDMP1, Bone morphogenetic protein 14, Cartilage-derived morphogenetic protein 1, Lipopolysaccharide-associated protein 4, Radotermin

### Description

**Source:** Genetically modified E.coli.

**Predicted MW:** Dimer, 13.7/27.4 kDa (121/242 aa)

Growth differentiation factor 5 (GDF-5) is a member of the bone morphogenetic protein (BMP) and transforming growth factor beta (TGF-beta) families and functions to regulate cell proliferation and differentiation in embryonic and adult tissues. GDF-5 is expressed in the central nervous system and promotes the survival of dopaminergic neurons in animal models of Parkinson's disease. GDF-5 is also important during chondrogenesis and chondrocyte differentiation.

### Product Info

**Amount :** 50 µg / 100 µg  
**Purification :** Reducing and Non-Reducing SDS PAGE at  $\geq 95\%$   
 Lyophilized from a sterile (0.2 micron) filtered aqueous solution containing 0.1% Trifluoroacetic Acid (TFA)  
**Content :** Sterile water at 0.1 mg/mL  
**Storage condition :** Store at  $-20^{\circ}\text{C}$   
**Amino Acid :** MAPLATRQ GK RPSKNLKARC SRKALHVNFK DMGWDDWIIA PLEYEAFHCE GLCEFPLRSH LEPTNHAVIQ TLMNSMDPES TPPTCCVPTR LSPISILFIDSA NNVVYKQY EDMVVESECGC R

### Application Note

**Endotoxin:** Less than  $0.1 \text{ ng}/\mu\text{g}$  (1 IEU/ $\mu\text{g}$ ) as determined by LAL test.

Biological Activity was determined by Alkaline phosphatase activity in ATDC5 cells at  $\leq 1.2 \text{ ug/mL}$ ;  $\geq 8.3 \times 10^2 \text{ units/mg}$  (typical ED50 is  $< 25 \text{ ng/mL}$ ). Centrifuge vial before opening, Suspend the product by gently pipetting the above recommended solution down the sides of the vial. DO NOT VORTEX. Allow several minutes for complete reconstitution. For prolonged storage, dilute to working aliquots in a 0.1% BSA solution, store at  $-80^{\circ}\text{C}$  and avoid repeat freeze thaws. Upon reconstitution, a small amount of visible precipitate can be expected. A 10% overfill has been added to the total material vial to compensate for this loss.



