

## 32-12086: Human Growth and Differentiation Factor-11 (AF)

**Gene :** GDF11  
**Gene ID :** 10220  
**Uniprot ID :** O95390  
**Alternative Name :** Bone morphogenetic protein 11, BMP11

### Description

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

**Predicted MW:** Dimer, 12.5/24.9 kDa (109/218 aa)

Growth differentiation factor 11 (GDF-11), also known as bone morphogenetic protein 11 (BMP-11), is a regulator of cell growth and differentiation during muscular and neural development. GDF-11 binds the transforming growth factor-beta receptors ALK4, ALK5, and ALK7 to activate SMAD signaling. In adults, exogenous GDF-11 promotes cardiomyocyte regeneration to reverse age-related cardiac hypertrophy.

### Product Info

**Amount :** 20 µg / 100 µg  
**Purification :** Reducing and Non-Reducing SDS PAGE at  $\geq 95\%$   
**Content :** Lyophilized from a sterile (0.2 micron) filtered aqueous solution containing 0.1% Trifluoroacetic Acid (TFA)  
Sterile 10 mM HCl at 0.1 mg/mL  
**Storage condition :** Store at  $-20^{\circ}\text{C}$   
**Amino Acid :** NLGLDCDEHS SESRCCRYPL TVDFEAFGWD WIIAPKRYKA NYCSGQCEYM FMQKYPHTHL  
VQQANPRGSA GPCCTPTKMS PINMLYFNDK QQIYGKIPG MVDRCGCS

### 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  $\leq 100 \text{ ng/mL}$ ;  $\geq 1.0 \times 10^4$  units/mg (typical ED50 is  $< 10 \text{ ng/mL}$ ). 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.



