

# BMP-11/GDF-11, human recombinant

<b>CATALOG #:</b>	7155-10	10 µg
	7155-50	50 µg
<b>ALTERNATE NAMES:</b>	Growth/Differentiation Factor-11, BMP-11	
<b>SOURCE:</b>	E Coli	
<b>PURITY:</b>	≥ 98% by SDS-PAGE gel and HPLC analyses	
<b>MOL. WEIGHT:</b>	25 kDa	
<b>ENDOTOXIN LEVEL:</b>	< 0.1 ng/µg of protein (<1EU/µg).	
<b>FORM:</b>	Lyophilized	
<b>FORMULATION:</b>	Sterile filtered through a 0.2 micron filter. Lyophilized with no additives.	
<b>STORAGE CONDITIONS:</b>	Store at -20°C. After reconstitution, aliquot and store at -20°C to -80°C. Avoid repeated freezing and thawing cycles.	

**RECONSTITUTION:**

Centrifuge the vial prior to opening. Reconstitute in water to a concentration of 0.1-1.0 mg/ml. Keep pH below 5.0. Do not vortex. This solution can be stored at 2-8°C for up to 1 week. For extended storage, it is recommended to further dilute in a buffer containing a carrier protein (example 0.1% BSA) and store in working aliquots at -20°C to -80°C.

**DESCRIPTION:**

GDF-11 is a myostatin-homologous protein that acts as an inhibitor of nerve tissue growth. GDF-11 has been shown to suppress neurogenesis through a myostatin-like pathway, which involves arrest of progenitor cell cycle in the G1 phase. Similarities between myostatin and GDF-11, which are 90% identical in their amino acid sequence, suggests that the regulatory mechanisms responsible for maintaining proper tissue size during neural and muscular development might be the same. Recombinant human GDF-11 is a 25.0 kDa disulfide-linked homodimer containing two 109 amino acid polypeptide chains. It is highly homologous to myostatin/GDF-8 sharing 90% amino acid sequence identity.

**BIOLOGICAL ACTIVITY:**

Determined by its ability to inhibit induced alkaline phosphatase production by ATDC-5 chondrogenic cells. The ED<sub>50</sub> for this effect is 0.08-0.10 µg/ml.

**AMINO ACID SEQUENCE:**

NLGLDCDEHS SESRCCRYPL TVDFEAFGWD WIIAPKRYKA NYCSGQCEYM  
FMQKYPHTHL VQQANPRGSA GPCCTPTKMS PINMLYFNDK QQIYGKIPG  
MVDRCGCS

**RELATED PRODUCTS:**

- GDF-2, human recombinant (Cat. No. 7154-10, -50)
- GDF-15-D, human recombinant (Cat. No. 4570-20, -100, -1000)
- GDF-15, human recombinant (Cat. No. 4569-20, -100, -1000)
- GDF-3, human recombinant (Cat. No. 4757-20, -100, -1000)
- GDF-5, human recombinant (Cat. No. 4667-20, -100, -1000)
- GDF-9, human recombinant (Cat. No. 4872-20, -100, -1000)

**FOR RESEARCH USE ONLY! Not to be used in humans.**