**Bio Vision** rev 02/14 For research use only

# BMP-11/GDF-11, human recombinant

**CATALOG #**: 7155-10 10 μg 7155-50 50 μg

**ALTERNATE NAMES:** Growth/Differentiation Factor-11, BMP-11

SOURCE: E Coli

**PURITY:** ≥ 98% by SDS-PAGE gel and HPLC analyses

MOL. WEIGHT: 25 kDa

**ENDOTOXIN LEVEL:** < 0.1 ng/μg of protein (<1EU/μg).

FORM: Lyophilized

**FORMULATION:** Sterile filtered through a 0.2 micron filter.

Lyophilized with no additives.

STORAGE CONDITIONS: 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

# **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  $0.08-0.10 \mu g/ml$ .

### AMINO ACID SEQUENCE:

NLGLDCDEHS SESRCCRYPL TVDFEAFGWD WIIAPKRYKA NYCSGQCEYM FMQKYPHTHL VQQANPRGSA GPCCTPTKMS PINMLYFNDK QQIIYGKIPG MVVDRCGCS

# 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.

