

## 32-20142: Recombinant Human/Murine/Rat GDF-11(Discontinued)

**Reactivity :** Human, Mouse, Rat

**Alternative Name :** Growth/Differentiation Factor-11, BMP-11

### Description

**Source:** *E. coli* 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 the arrest of the progenitor cell cycle in the G1 phase. Similarities between myostatin and GDF-11, which are 90% identical in their amino acid sequence, suggest that the regulatory mechanisms responsible for maintaining proper tissue size during neural and muscular development might be the same. Recombinant Human/Murine/Rat 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.

### Product Info

**Amount :** 5 µg / 20 µg

**Purification :** Purity: >= 98% by SDS-PAGE gel and HPLC analyses.

**Content :** This recombinant protein is supplied in lyophilized form.

**Amino Acid :** NLGLDCDEHS SESRCCRYPL TVDFEAFGWD WIIAPKRYKA NYCSGQCEYM FMQKYPHTHL  
VQQANPRGSA GPCCTPTKMS PINMLYFNDK QQIYKIPG MVDRCGCS

### Application Note

Assay #1: Determined by its ability to inhibit induced alkaline phosphatase production by ATDC-5 chondrogenic cells. The expected ED<sub>50</sub> for this effect is 0.08-0.10 µg/ml. Assay #2: Determined by its ability to inhibit alkaline phosphatase activity in differentiating MC3T3/E1 cells. The ED<sub>50</sub> for this effect is 8-10 ng/ml.