

## Recombinant Murine GDF-5 (BMP-14/CDMP-1)

Catalog # PBG10136

## **Specification**

## Recombinant Murine GDF-5 (BMP-14/CDMP-1) - Product Information

### Recombinant Murine GDF-5 (BMP-14/CDMP-1) - Additional Information

### **Description**

GDF-5 is expressed in long bones during embryonic development and postnatally in articular cartilage. Mutations in the GDF-5 gene have been implicated in Grebe Syndrome, which is characterized by short stature, extra digits, short and deformed extremities, and in Hunter-Thompson type dwarfism. The mature and functional form of GDF-5 is a homodimer of two 120 amino-acid polypeptide chain (monomers) linked by a single disulfide bond. Each GDF-5 monomer is expressed as the C-terminal part of a precursor polypeptide, which also contains a 27 amino-acid signal peptide and a 348 amino-acid propeptide. This precursor undergoes intracellular dimerization, and upon secretion it is processed by a furin-type protease. Recombinant murine GDF-5 is a 27.0 kDa homodimeric disulfide-linked protein consisting of two 120 amino acids.

### **Biological**Activity

Determined by its ability to induce alkaline phosphatase production by ATDC-5 cells. The expected ED<sub>50 </sub>for this effect is 1.0-2.0  $\mu$ g/ml.

#### Authenticity

Verified by N-terminal and Mass Spectrometry analyses (when applicable).

#### **Endotoxin**

Endotoxin level is  $<0.1 \text{ ng}/\mu\text{g}$  of protein ( $<1\text{EU}/\mu\text{g}$ ).

#### **Protein Content**

Verified by UV Spectroscopy and/or SDS-PAGE gel.

### Storage

-20°C

## **Precautions**

Recombinant Murine GDF-5 (BMP-14/CDMP-1) is for research use only and not for use in diagnostic or therapeutic procedures.

# Recombinant Murine GDF-5 (BMP-14/CDMP-1) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence





• Immunoprecipitation

- Flow Cytomety
  Cell Culture

Recombinant Murine GDF-5 (BMP-14/CDMP-1) - Images