

# **Growth Differentiation Factor 10, human recombinant (rHuGDF10)**

Catalog No: 97273 Lot No: XXXXX Source: E. coli

**Synonyms:** Bone morphogenetic protein 3b, BMP-3b, Growth/differentiation factor 10, GDF-10, Bone-inducing

protein, BIP, GDF10, BMP3B

#### **Background**

GDF10 is a member of the BMP family and the TGF-beta superfamily. GDF10 is expressed in femur, brain, lung, skeletal, muscle, pancreas and testis, and has a role in head formation and possibly multiple roles in skeletal morphogenesis. In humans, GDF10 mRNA is found in the cochlea and lung of fetuses, and in testis, retina, pineal gland, and other neural tissues of adults. The BMP family members are regulators of cell growth and differentiation in both embryonic and adult tissues. These proteins are characterized by a polybasic proteolytic processing site which is cleaved to produce a mature protein containing 7 conserved cysteine residues.

## Description

GDF10 human recombinant produced in *E. coli* is a single, non-glycosylated, polypeptide chain containing 111 amino acids (369-478) and having a total molecular mass of 12.5 kDa. GDF10 is purified by proprietary chromatographic techniques.

## **Physical Appearance**

Sterile filtered colorless solution.

## **Formulation**

The GDF10 solution (0.5 mg/ml) contains 10 mM sodium citrate (pH 3.5), 1 mM DTT, 40% glycerol and 0.1 M NaCl.

# Stability

GDF10, although stable at 4°C for 4 weeks, should be stored desiccated below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

#### **Purity**

Greater than 95.0% as determined by SDS-PAGE.

#### **Amino Acid Sequence**

MQWDEPRVCS RRYLKVDFAD IGWNEWIISP KSFDAYYCAG ACEFPMPKIV RPSNHATIQS IVRAVGIIPG IPEPCCVPDK MNSLGVLFLD ENRNVVLKVY PNMSVDTCAC R

# Usage

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