Growth Differentiation Factor 5, His Tag, human recombinant (rHuGDF5-His)

Catalog No: 97267
Lot No: XXXXX
Source: *E. coli*
Synonyms: Cartilage-derived morphogenetic protein-1, CDMP-1, LAP4, SYNS2, GDF-5, Radotermin, CDMP1, GDF5, Growth differentiation factor 5, BMP-14

Background

GDF-5 is a member of the bone morphogenetic protein (BMP) family and the TGF-beta superfamily. This group of proteins is characterized by a polybasic proteolytic processing site which is cleaved to produce a mature protein containing seven conserved cysteine residues. The members of this family are regulators of cell growth and differentiation in both embryonic and adult tissues. Mutations in this gene are associated with acromesomelic dysplasia, Hunter-Thompson type; brachydactyly, type C; and chondrodysplasia, Grebe type. These associations confirm that the gene product plays a role in skeletal development.

Description

GDF5 human recombinant produced in *E. coli* is a single, non-glycosylated, polypeptide chain containing 141 amino acids (382-501) and having a total molecular mass of 15.8 kDa. GDF5 is fused to 20 amino acid His Tag at N-terminus and purified by proprietary chromatographic techniques.

Physical Appearance

Sterile filtered colorless solution.

Formulation

The GDF5 solution contains 10 mM sodium citrate pH 3.5 and 10% glycerol.

Stability

GDF5, 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

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MGSSHHHHHH SSGLVPRGSH MAPLATRQGK RPSKNLKARC SRKALHVNFK DMGWDDWIIA PLEYEAFHCE GLCEFPLRSH
LEPTNHAVIQ TLMNSMDPES TPPTCCVPTR LSPISILFID SANNVVYKQY EDMVVESCGC R
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Usage

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