

32-20140: Recombinant Murine GDF-5 (BMP-14/CDMP-1)(Discontinued)

Alternative Name : Growth/Differentiation Factor-5, BMP-14, Cartilage-Derived Morphogenetic Protein-1 (CDMP-1)

Description

Source: **E.coli** 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 Hunter-Thompson type dwarfism and in Grebe Syndrome, which is characterized by short stature, extra digits, and short and deformed extremities. The mature and functional form of GDF-5 is a homodimer of two 120 amino acid polypeptide chains (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 acid polypeptide chains.

Product Info

Amount : 10 µg / 50 µg

Purification : Purity: $\geq 98\%$ by SDS-PAGE gel and HPLC analyses.

Content : This recombinant protein is supplied in lyophilized form.

Amino Acid : APLANRQGKR PSKNLKARCS RKALHVNFKD MGWDDWIIAP LEYEAHFCEG LCEFPLRSHL EPTNHAVIQT
LMNSMDPEST PPTCCVPTRL SPISILFIDS ANNVVYKQYE DMVVESGCR

Application Note

Determined by its ability to induce alkaline phosphatase production by ATDC-5 cells. The expected ED_{50} for this effect is 1.0-2.0 µg/ml.