

GDF5

Recombinant Human Growth Differentiation Factor 5

Catalog No.	CRB125A	Quantity:	10 µg
	CRB125B		50 µg
	CRB125C		1 mg

Alternate Names: BMP14, CDMP1, LAP4, OS5, SYNS2

Gene ID: 8200

Protein Accession No: NP_000548

Description: GDF5 is a bone morphogenetic protein (BMP). BMPs belong to the TGF-β superfamily of structurally related signaling proteins. As implied by their name, BMPs promote and regulate bone development, growth, remodeling and repair, in both prenatal development and postnatal growth of eye, heart, kidney, skin, and other tissues. In addition to its osteogenic activity, GDF5 is a principal inhibitor of cartilage development and is predominantly expressed in long bone during human embryonic development. Recombinant human GDF5 is a homodimeric protein consisting of two 120 amino acid polypeptide chains.

Source: *E. coli*

Molecular Weight: 27 kDa

Formulation: Lyophilized from 10 mM sodium citrate, pH 3.5

Purity: > 98% as determined by SDS-PAGE and HPLC analyses

Endotoxin Level: < 0.1 ng/µg of GDF5

Biological Activity: Determined by its ability to induce alkaline phosphatase production by ATDC-5 chondrogenic cells. The ED₅₀ is 1-2 µg/ml.

Reconstitution: **Centrifuge vial prior to opening.** First add sterile distilled water containing BSA (50 µg BSA per 1 µg of protein) to the vial to fully solubilize the protein to a concentration of 0.1 -1.0 mg/ml. After complete solubilization of the protein, it can be further diluted to other aqueous solutions. **Please note that the addition of any carrier protein into this product may produce unwanted endotoxin. This depends upon the particular application employed.**

Storage & Stability: Store lyophilized protein at -20°C to -80°C. Reconstituted protein is stable for 1 week at 2-4°C. For long term storage, aliquot and store at -20°C. **Avoid repeated freeze-thaw cycles.**

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Cell Sciences®
480 Neponset Street
Bldg 12A
Canton, MA 02021

Toll Free: 888-769-1246
Phone: 781-828-0610
Fax: 781-828-0542

E-mail: info@cellsciences.com
Website: www.cellsciences.com