

Growth and Differentiation factor 5 Active Protein | GDF5 active protein

Recombinant Human Growth and Differentiation factor 5

CATALOG #
AAA38207

HOST
E Coli

PRODUCT SYNONYMS

Growth and Differentiation factor 5; Recombinant Human Growth and Differentiation factor 5; GDF5 Human; Growth Differentiation Factor-5 Human Recombinant; Cartilage-derived morphogenetic protein-1; CDMP-1; LAP4; SYNS2; GDF-5; Radotermis; CDMP1; GDF5; Growth differentiation factor 5; BMP-14; GDF5 active protein

PRODUCT SPECIFICATIONS

Host	E Coli
Purity/Purification	Greater than 98.0% as determined by: (a) Analysis by RP-HPLC. (b) Analysis by SDS-PAGE.
Form/Format	The protein was lyophilized without any additives. Sterile Filtered White lyophilized (freeze-dried) powder.
Sequence	APSATRQGKR PSKNLKARCS RKALHVNFKD MGWDDWIIAP LEYEAHFCEG LCEFPLRSHL EPTNHAVIQT LMNSMDPEST PPTCCVPTRL SPISILFIDS ANNVVYKQYE DMVVESCGCR
Sequence Length	501
Solubility	It is recommended to reconstitute the lyophilized Growth Differentiation Factor-5 in sterile 18M Omega -cm H2O not less than 100 ug/ml, which can then be further diluted to other aqueous solutions.
Protein Content	Protein quantitation was carried out by two independent methods:1. UV spectroscopy at 280 nm using the absorbency value of 1.15 as the extinction coefficient for a 0.1% (1mg/ml) solution. This value is calculated by the PC GENE computer analysis program of protein sequences (IntelliGenetics). 2. Analysis by RP-HPLC, using a standard solution of GDF5 as a Reference Standard.
Biological Activity	GDF-5 activity as determined by the induction of alkaline phosphatase activity in ATDC5 cells is typically 10-20ng/ml.
Preparation and Storage	Lyophilized Growth Differentiation Factor 5 although stable at room temperature for 3 weeks, should be stored desiccated below -18 degree C. Upon reconstitution Growth Differentiation Factor-5 should be stored at 4 degree C between 2-7 days and for future use below -18 degree C.For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).Please prevent freeze-thaw cycles.

ADDITIONAL INFORMATION

Related Product Information for GDF5 active protein	Description: Growth Differentiation Factor 5 Human Recombinant produced in E Coli is a homodimer, non-glycosylated polypeptide chain containing 2 x 120 amino acids and having a total molecular mass of 27.4kDa. To enable bacterial expression the N-terminal sequence of Ala-Pro-Leu-Thr was replaced with a Lys.GDF5 is purified by proprietary chromatographic techniques. Introduction: 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.
Product Categories/Family for GDF5 active protein	Cytokines and Growth Factors; Cytokines; Bone Morphogenetic Protein

NCBI AND UNIPROT INFORMATION

NCBI GI #	611435007
NCBI GeneID	8200
NCBI Accession #	NP_000548.2
NCBI GenBank Nucleotide #	NM_000557.4
UniProt Accession #	P43026; Q96SB1; E1P5Q2
Molecular Weight	55,411 Da
NCBI Official Full Name	growth/differentiation factor 5 preproprotein
NCBI Official Synonym Full Names	growth differentiation factor 5
NCBI Official Symbol	GDF5
NCBI Official Synonym Symbols	OS5; LAP4; BDA1C; BMP14; CDMP1; LAP-4; SYM1B; SYNS2; BMP-14
NCBI Protein Information	growth/differentiation factor 5; CDMP-1; LPS-associated protein 4; bone morphogenetic protein 14; cartilage-derived morphogenetic protein-1; lipopolysaccharide-associated protein 4; radotermin
UniProt Protein Name	Growth/differentiation factor 5
UniProt Gene Name	GDF5
UniProt Synonym Gene Names	BMP14; CDMP1; GDF-5; BMP-14; CDMP-1; LAP-4; LPS-associated protein 4
UniProt Entry Name	GDF5_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://www.aaabiotech.com/e-coli-gdf5-active-protein/growth-and-differentiation-factor-5/38207>