

Active Recombinant Human GDF5 Protein

Cat. No. GDF5-107H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human GDF5 Protein without tag was expressed in E. coli.
Species	Human
Source	E.coli
Description	Growth differentiation factor 5 (GDF-5) is a member of the bone morphogenetic protein (BMP) and transforming growth factor beta (TGF- β) families and functions to regulate cell proliferation and differentiation in embryonic and adult tissues. GDF-5 is expressed in the central nervous system and promotes the survival of dopaminergic neurons in animal models of Parkinson's disease. GDF-5 is also important during chondrogenesis and chondrocyte differentiation.
Bio-activity	Alkaline phosphatase activity in ATDC5 cells, ≤ 1.2 $\mu\text{g/mL}$
Molecular Mass	Dimer, 13.7/27.4 kDa (121/242 aa)
AA Sequence	MAPLATRQGKRPSKNLKARCSRKALHVNFKDMGWDDWIIAPLEYEAFHCEGLCEFP LRSHLEPTNHAVIQTLMNMDPESTPPTCCVPTRLSPISILFIDSANNVYKQYEDMV VESCGCR
Endotoxin	≤ 1 EUs/ μg , Kinetic LAL
Purity	$\geq 95\%$, Reducing and Non-Reducing SDS PAGE

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

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Stability	12 months from date of receipt when stored at -20 to -80 centigrade as supplied. 1 month when stored at 4 centigrade after reconstituting as directed. 3 months when stored at -20 to -80 centigrade after reconstituting as directed.
Storage	Storage Prior to Reconstitution: -20 centigrade
Storage Buffer	Lyophilized from a sterile (0.2 micron) filtered aqueous solution containing 0.1% Trifluoroacetic Acid (TFA)
Reconstitution	Sterile water at 0.1 mg/mL
Shipping	Room temperature
Instructions	Centrifuge vial before opening. Suspend the product by gently pipetting the above recommended solution down the sides of the vial. DO NOT VORTEX. Allow several minutes for complete reconstitution. For prolonged storage, dilute to working aliquots in a 0.1% BSA solution, store at -80 centigrade and avoid repeat freeze thaws.

GENE INFORMATION

Gene Name	GDF5 growth differentiation factor 5 [Homo sapiens (human)]
Official Symbol	GDF5
Synonyms	GDF5; growth differentiation factor 5; growth/differentiation factor 5; BMP14; cartilage derived morphogenetic protein 1; CDMP1; GDF-5; CDMP-1; radetermin; cartilage-derived morphogenetic protein-1; OS5; LAP4; SYNS2;
Gene ID	8200
mRNA Refseq	NM_000557

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Protein Refseq	NP_000548
MIM	601146
UniProt ID	P43026

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