

Recombinant Active Human Gdf5 Protein, His-tagged(C-ter)

Cat. No. GDF5-105H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Active Human Gdf5 Protein with His tag (C-ter) was expressed in E. coli.
Species	Human
Source	E.coli
Description	This gene encodes a secreted ligand of the TGF-beta (transforming growth factor-beta) superfamily of proteins. Ligands of this family bind various TGF-beta receptors leading to recruitment and activation of SMAD family transcription factors that regulate gene expression. The encoded preproprotein is proteolytically processed to generate each subunit of the disulfide-linked homodimer. This protein regulates the development of numerous tissue and cell types, including cartilage, joints, brown fat, teeth, and the growth of neuronal axons and dendrites. Mutations in this gene are associated with acromesomelic dysplasia, brachydactyly, chondrodysplasia, multiple synostoses syndrome, proximal symphalangism, and susceptibility to osteoarthritis.
Form	Powder
Bio-activity	Determined by its ability to induce alkaline phosphatase production by ATDC5 cells. The ED50 for this effect is < 14 ng/mL.
AA Sequence	MAPLATRQGKRPSKNLKARCSRKALHVNFKDMGWDDWIIAPLEYEAFHCEGLCEFP LRSHLEPTNHAIVIQTLMNSMDPESTPPTCCVPTRLSPISILFIDSANNVVKQYEDMV VESCGR

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Endotoxin	Endotoxin level is less than 0.1 EU/μg of the protein, as determined by the LAL test.
Purity	> 98% (by SDS-PAGE)
Applications	SDS-PAGE
Notes	For laboratory research only, not for drug, diagnostic or other use.
Storage	Lyophilized protein should be stored at -20°C. After reconstitution, aliquot and store at -20°C or -80°C for up to one month. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening.
Storage Buffer	20 mM Sodium citrate (pH 3.5) and 0.2 M NaCl.
Reconstitution	It is recommended to reconstitute the lyophilized protein in sterile water to a concentration not less than 100 μg/mL and incubate the stock solution for at least 20 min at room temperature to make sure the protein is dissolved completely.

GENE INFORMATION

Gene Name	GDF5 growth differentiation factor 5 [Homo sapiens]
Official Symbol	GDF5
Synonyms	GDF5; growth differentiation factor 5; growth/differentiation factor 5; BMP14; cartilage derived morphogenetic protein 1; CDMP1; GDF-5; CDMP-1; radotermis; cartilage-derived morphogenetic protein-1; OS5; LAP4; SYNS2;
Gene ID	8200

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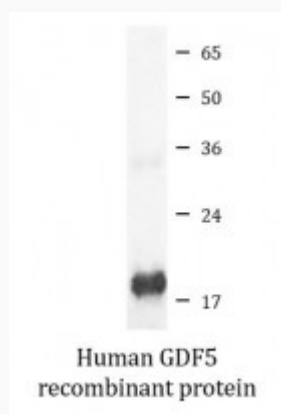
mRNA Refseq [NM_000557](#)

Protein Refseq [NP_000548](#)

MIM [601146](#)

UniProt ID [P43026](#)

SDS-PAGE



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