

Active Recombinant Human GDF5 Protein

Cat. No. GDF5-049H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	The mature recombinant human GDF-5 protein (382-501aa) without tag was expressed in E. coli.
Species	Human
Source	E.coli
ProteinLength	382-501 a.a.
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.
Bio-activity	The ED50 was determined by its ability to induce alkaline phosphatase production by ATDC-5 chondrogenic cells is 1.0-2.0 µg/ml.
Molecular Mass	14 kDa
Product-Related	382-501

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Proteins	
Endotoxin	< 0.1 EU/μg of the protein as determined by the LAL method
Purity	> 95 % as determined by SDS-PAGE
Storage	At -80 centigrade. Avoid repeated freeze-thaw cycles.
Storage Buffer	PBS

GENE INFORMATION

Gene Name	GDF5 growth differentiation factor 5 [Homo sapiens (human)]
Official Symbol	GDF5
Synonyms	GDF5; growth differentiation factor 5; OS5; LAP4; BDA1C; BMP14; CDMP1; LAP-4; SYM1B; SYNS2; BMP-14; DUPANS; growth/differentiation factor 5; Names; LPS-associated protein 4; bone morphogenetic protein 14; cartilage-derived morphogenetic protein-1; lipopolysaccharide-associated protein 4; radotermin
Gene ID	8200
mRNA Refseq	NM_000557
Protein Refseq	NP_000548
MIM	601146
UniProt ID	P43026

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