

Active Recombinant Human GDF5 Protein (Ala382-Arg501), C-His tagged, Animal-free, Carrier-free

Cat. No. GDF5-299H Lot. No. (See product label)

SPECIFICATION

Product Overview	Recombinant Human GDF5 Protein (Ala382-Arg501) with C-His tag was expressed in E. coli and Animal-free as well as Carrier-free.
Species	Human
Source	E.coli
ProteinLength	Ala382-Arg501
Description	Bone Morphogenetic Protein-14 (BMP-14), known as Growth differentiation factor 5 (GDF5), is an extracellular multifunctional cytokine that is also a member of the TGFβ family. BMP-14 can bind with the TGFβ receptor and trigger SMAD protein signal transduction. BMP-14 plays a role in skeletal and joint development and increases the survival of neurons that respond to the neurotransmitter dopamine.
Form	Lyophilized
Bio-activity	Measure by its ability to induce alkaline phosphatase production by ATDC5 cells. The ED50 for this effect is < 14 ng/mL.
Molecular Mass	The protein has a calculated MW of 14.52 kDa. The protein migrates as 18 kDa under reducing condition (SDS-PAGE analysis).
Endotoxin	< 0.1 EU/μg of the protein by the LAL method.

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Purity	>98% as determined by SDS-PAGE analysis.
Storage	This product is stable after storage at: -20 centigrade for 12 months in lyophilized state from date of receipt. -20 or -80 centigrade for 1 month under sterile conditions after reconstitution. Avoid repeated freeze/thaw cycles.
Storage Buffer	Lyophilized from a 0.2 µm filtered solution containing 20 mM sodium citrate and 0.2 M NaCl, pH 3.5.
Reconstitution	It is recommended to reconstitute the lyophilized protein in 4 mM HCl to a concentration not less than 200 µg/mL and incubate the stock solution for at least 20 min to ensure sufficient re-dissolved.
Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at -20 centigrade or lower for long term storage.

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; radotermis; cartilage-derived morphogenetic protein-1; OS5; LAP4; SYNS2;
Gene ID	8200
mRNA Refseq	NM_000557

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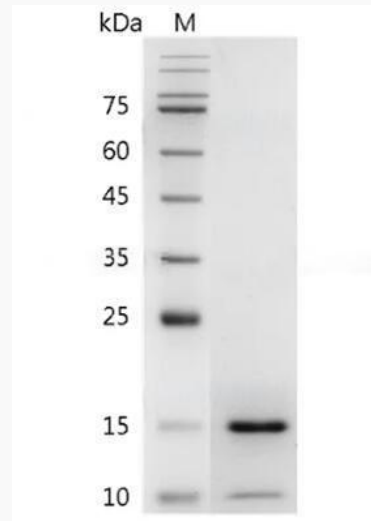
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Protein Refseq NP_000548

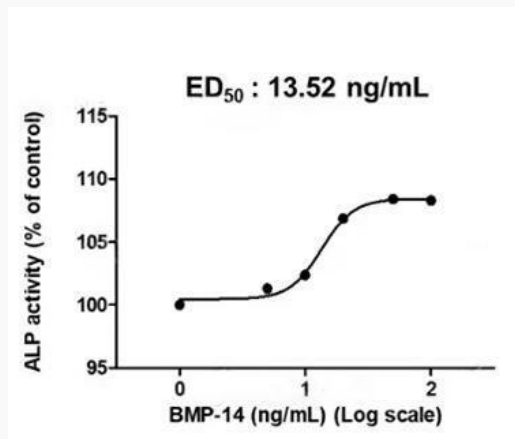
MIM 601146

UniProt ID P43026

SDS-PAGE analysis
of recombinant
human BMP-14.



Activity



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Human BMP-14, His Tag, E. coli (LDG112PHE) induced alkaline phosphatase production by ATDC5 cells, with the ED50 at 13.52 ng/mL.

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