

Recombinant Human GDF5 Protein (Ala382-Arg501), His tagged

Cat. No. GDF5-2449H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant human GDF5 (Ala382-Arg501) protein fused with His tag was expressed in E. coli.
Species	Human
Source	E.coli
ProteinLength	Ala382-Arg501
Description	Growth factor involved in bone and cartilage formation. During cartilage development regulates differentiation of chondrogenic tissue through two pathways. Firstly, positively regulates differentiation of chondrogenic tissue through its binding of high affinity with BMPR1B and of less affinity with BMPR1A, leading to induction of SMAD1-SMAD5-SMAD8 complex phosphorylation and then SMAD protein signaling transduction. Secondly, negatively regulates chondrogenic differentiation through its interaction with NOG. Required to prevent excessive muscle loss upon denervation. This function requires SMAD4 and is mediated by phosphorylated SMAD1/5/8. Binds bacterial lipopolysaccharide (LPS) and mediates LPS-induced inflammatory response, including TNF secretion by monocytes.
Molecular Mass	15.1 kDa
Purity	>90 % as determined by SDS-PAGE.

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Notes	For research use only.
Storage	Use a manual defrost freezer and avoid repeated freeze thaw cycles. Store at 2 to 8 centigrade for one week. Store at -20 to -80 centigrade for twelve months from the date of receipt.
Storage Buffer	Supplied as solution form in PBS pH 7.5 or lyophilized from PBS pH 7.5.
Reconstitution	Reconstitute in sterile water for a stock solution.
Shipping	In general, proteins are provided as lyophilized powder/frozen liquid. They are shipped out with dry ice/blue ice unless customers require otherwise.

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; radotermin; cartilage-derived morphogenetic protein-1; OS5; LAP4; SYNS2;
Gene ID	8200
mRNA Refseq	NM_000557
Protein Refseq	NP_000548
MIM	601146

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UniProt ID

P43026

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