

ARG70100 Human GDF5 recombinant protein (Active) (His-tagged, C-ter)

Package: 100 µg, 20 µg
Store at: -20°C

Summary

Product Description	E. coli expressed, His-tagged (C-ter) Active Human GDF5 recombinant protein
Tested Application	SDS-PAGE
Target Name	GDF5
Species	Human
A.A. Sequence	Ala382 - Arg501
Expression System	E. coli
Activity	Active
Activity Note	Determined by its ability to induce alkaline phosphatase production by ATDC5 cells. The ED50 for this effect is < 14 ng/mL.
Alternate Names	Cdmp-1; GDF-5; Growth/differentiation factor 5; Bone morphogenetic protein 14; brp; BMP-14; bp

Properties

Form	Powder
Purification Note	Endotoxin level is less than 0.1 EU/µg of the protein, as determined by the LAL test.
Purity	> 98% (by SDS-PAGE)
Buffer	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 at room temperature to make sure the protein is dissolved completely.
Storage instruction	For long term, lyophilized protein should be stored at -20°C or -80°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.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol	Gdf5
Gene Full Name	growth differentiation factor 5
Function	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 (By similarity). Secondly, negatively regulates chondrogenic differentiation through its interaction with NOG (By similarity). 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 (By similarity). [UniProt]



Human GDF5
recombinant protein

ARG70100 Human GDF5 recombinant protein (Active) (His-tagged, C-ter) SDS-PAGE image

SDS-PAGE analysis of ARG70100 Human GDF5 recombinant protein (Active) (His-tagged, C-ter).