

Product: **Recombinant Human GDF-5**
Cat #: 300-130P
Powder

Description	Growth/Differentiation Factor 5 (GDF-5) is a growth factor that regulates cell proliferation and differentiation in embryonic and adult tissues. GDF-5 is part of the TGF family of proteins and is closely related to the BMP family of proteins. Alternate names: CDMP-1
MW	Non-glycosylated homodimer, containing two 120 amino acids chains, with a total molecular weight of 27.4 kDa. To enable bacterial expression the N-terminal sequence of Ala-Pro-Leu-Thr was replaced with a Lys.
Physical Appearance	Sterile filtered white lyophilized (freeze-dried) powder.
Source	<i>E. coli</i>
Formulation	Recombinant human GDF-5 is lyophilized with no additives.
Reconstitution	Centrifuge vial before opening. When reconstituting the product, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution. It is recommended to reconstitute the lyophilized product with sterile water at a concentration of 0.1 mg/mL, which can be further diluted into other aqueous solutions.
Stability	Lyophilized product is very stable at -20°C. Reconstituted material should be aliquoted and frozen at -20°C. It is recommended that a carrier protein (0.1% HSA or BSA) is added for long term storage.
Biological Activity	The activity is determined by the ability to induce alkaline phosphatase activity in ATDC5 cells is typically 0.1-1 µg/mL.
Endotoxin Level	Measured by kinetic LAL analysis and is typically ≤ 1 EU/µg protein.
AA Sequence	APSATRQGKR PSKNLKARCS RKALHVNFKD MGWDDWIIAP LEYEAHFCEG LCEFPLRSHL EPTNHAVIQT LMNSMDPEST PPTCCVPTRL SPISILFIDS ANNVYKQYE DMVVESCGCR

Purity greater than 98% determined by HPLC, Reducing and Non-reducing SDS-PAGE, UV spectroscopy at 280 nm.

Protein content determined by HPLC, Reducing and Non-reducing SDS-PAGE, UV spectroscopy at 280 nm.

THIS PRODUCT IS FOR RESEARCH USE ONLY AND IS NOT FOR USE IN HUMANS!