

Growth Differentiation Factor-5 Human Recombinant

Item Number	rAP-0380
Synonyms	Cartilage-derived morphogenetic protein-1, CDMP-1, LAP4, SYNS2, GDF-5, Radotermis, CDMP1, GDF5, Growth differentiation factor 5, BMP-14.
Description	Growth Differentiation Factor 5 Human Recombinant produced in E.Coli is a homodimer, non-glycosylated polypeptide chain containing 2 x 120 amino acids and having a total molecular mass of 27.4kDa. To enable bacterial expression the N-terminal sequence of Ala-Pro-Leu-Thr was replaced with a Lys.GDF5 is purified
Uniprot Accession Number	P43026
Amino Acid Sequence	APSATRQGKR PSKNLKARCS RKALHVNFKD MGWDDWIIAP LEYEAFHCEG LCEFPLRSHL EPT-NHAVIQT LMNSMDPEST PPTCCVPTRL SPISILFIDS ANNVDYKQYE DMVVESCGCR.
Source	Escherichia Coli.
Physical Appearance and Stability	Sterile Filtered White lyophilized (freeze-dried) powder. Lyophilized Growth Differentiation Factor 5 although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution Growth Differentiation Factor-5 should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent
Formulation and Purity	The protein was lyophilized without any additives. Greater than 98.0% as determined by: (a) Analysis by RP-HPLC. (b) Analysis by SDS-PAGE.
Application	
Solubility	It is recommended to reconstitute the lyophilized Growth Differentiation Factor-5 in sterile 18MΩ-cm H ₂ O not less than 100µg/ml, which can then be further diluted to other aqueous solutions.
Biological Activity	GDF-5 activity as determined by the induction of alkaline phosphatase activity in ATDC5 cells is typically 10 -20ng/ml.
Shipping Format and Condition	Lyophilized powder at room temperature.

Optimal dilutions should be determined by each laboratory for each application. The listed dilutions are for recommendation only and the final conditions should be optimized by the ender users! This product is sold for **Research Use Only**