

## Growth and Differentiation factor 5 Mouse Recombinant

<b>Item Number</b>	rAP-0397
<b>Synonyms</b>	Bmp-14, Bp, GDF-5, Bone morphogenetic protein 14, GDF5, Growth/differentiation factor 5.
<b>Description</b>	GDF5 Mouse Recombinant produced in E.coli is a non-glycosylated disulfide linked homodimer containing 2 chains of 120 amino acids and having a molecular mass of 27.2kDa. The GDF-5 is purified by proprietary chromatographic techniques.
<b>Uniprot Accession Number</b>	P43027
<b>Amino Acid Sequence</b>	APLANRQGKR PSKNLKARCS RKALHVNFKD MGWDDWIIAP LEYEAFHCEG LCEFPLRSHL EPT-NHAVIQT LMNSMDPEST PPTCCVPTRL SPISILFIDS ANNVVYKQYE DMVVESCGCR.
<b>Source</b>	Escherichia Coli.
<b>Physical Appearance and Stability</b>	Sterile Filtered White lyophilized (freeze-dried) powder. Lyophilized GDF5 although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution GDF-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 freeze-thaw cycles.
<b>Formulation and Purity</b>	GDF-5 protein was lyophilized from a 0.2µm filtered concentrated solution in 30% Acetonitrile and 0.1% TFA. Greater than 96.0% as determined by:(a) Analysis by RP-HPLC.(b) Analysis by SDS-PAGE.
<b>Application</b>	
<b>Solubility</b>	It is recommended to reconstitute the lyophilized GDF5 in sterile 4mM HCl not less than 100µg/ml, which can then be further diluted to other aqueous solutions.
<b>Biological Activity</b>	The ED50 as determined by inducing alkaline phosphatase production of murine ATDC5 cells is less than 1.0µg/ml, corresponding to a specific activity of > 1000IU/mg.
<b>Shipping Format and Condition</b>	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**