

# Recombinant Murine Growth Differentiation Factor 5/Bone Morphogenetic Protein-14

## Information

Gene ID	14563		
Accession #	P43027		
Alternate Names			
Source	Escherichia coli.		
M.Wt	Approximately 27.2 kDa, a disulfide-linked homodimeric protein containing two 120 amino acids.		
AA Sequence	APLANRQGKR PSKNLKARCS RKALHVNFKD MGWDDWIIAP LEYEAFHCEG LCEFPLRSHL EPTNHAVIQT LMNSMDPEST PPTCCVPTRL SPISILFIDS ANNVVYKQYE DMVVESCGCR		
Appearance	Sterile Filtered White lyophilized (freeze-dried) powder.		
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles - 12 months from date of receipt, -20 to -70 °C as supplied - 1 month, 2 to 8 °C under sterile conditions after reconstitution - 3 months, -20 to -70 °C under sterile conditions after reconstitution		
Formulation	Lyophilized from a 0.2 µm filtered concentrated solution in 30 % Acetonitrile and 0.1 % TFA.		
Reconstitution	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in 4 mM HCl to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at ≤ -20 °C. Further dilutions should be made in appropriate buffered solutions.		
Biological Activity	Fully biologically active when compared to standard. The ED as determined by inducing alkaline phosphatase production of murine ATDC5 cells is less than 1.0 $\mu$ g/ml, corresponding to a specific activity of > 1000 IU/mg.		
Shipping Condition	Gel pack.		
Handling	Centrifuge the vial prior to opening.		
Usage	For Research Use Only! Not to be used in humans.		

# Components and Storage

Components	10µg	100µg	500µg
Recombinant Murine Growth Differentiation Factor 5/Bone Morphogenetic Protein-14	10µg	100µg	500µg

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- 12 months from date of receipt, -20 to -70 °C as supplied
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- 3 months, -20 to -70 °C under sterile conditions after reconstitution

#### Quality Control

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Purity	> 96 % by SDS-PAGE and HPLC analyses.	P Entrange Tra
Endotoxin	Less than 0.1 EU/µg of rMuGDF-5/BMP-14 a	s determined by LAL method.

### Description

Growth/differentiation factors (GDF-1 to GDF-15) are members of the BMP family of TGF-beta superfamily proteins. They are produced as inactive preproproteins which are then cleaved and assembled into active secreted homodimers. GDF dimers are disulfide-linked with the exception of GDF-3 and -9. GDF proteins are important during embryonic development, particularly in the skeletal, nervous, and muscular systems.

#### Reference





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#### **APExBIO Technology**

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