

Recombinant Mouse Gdf5 protein

Cat. No. Gdf5-651M **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Mouse Gdf5 protein was expressed in Escherichia coli.
Species	Mouse
Source	E.coli
ProteinLength	120
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 preproteins 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.
Form	Lyophilized from a 0.2µm filtered concentrated solution in 30 % Acetonitrile and 0.1 % TFA.
Bio-activity	Fully biologically active when compared to standard. The ED50 as determined by inducing alkaline phosphatase production of murine ATDC5 cells is less than 1.0 µg/ml, corresponding to a specific activity of > 1000 IU/mg.
Molecular Mass	Approximately 27.2 kDa, a disulfide-linked homodimeric protein containing two 120 amino acids.

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AA Sequence	APLANRQGKRPSKNLKARCSRKALHVNFKDMGWDDWIIAPLEYEAFHCEGLCEFPL RSHLEPTNHAVIQTLMNNSMDPESTPPTCCVPTRLSPISILFIDSANNVVKQYEDMVV ESCGCR
Endotoxin	Less than 0.1 EU/g of rMuGDF-5/BMP-14 as determined by LAL method.
Purity	>96% by SDS-PAGE and HPLC analysis.
Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. 12 months from date of receipt, -20 to -70 centigrade as supplied. 1 month, 2 to 8 centigrade under sterile conditions after reconstitution. 3 months, -20 to -70 centigrade under sterile conditions after reconstitution.
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 centigrade. Further dilutions should be made in appropriate buffered solutions.

GENE INFORMATION

Gene Name	Gdf5
Official Symbol	Gdf5
Synonyms	GDF5; growth differentiation factor 5; growth/differentiation factor 5; GDF-5; brachypodism; cartilage-derived morphogenetic protein-1; bp; brp; Cdmp-1;
Gene ID	14563
mRNA Refseq	NM_008109

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Protein Refseq	NP_032135
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UniProt ID	P43027
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