

**Recombinant Murine Growth Differentiation
Factor 7/Bone Morphogenetic Protein-12
(rMuGDF-7/BMP-12)
PrimeGene Technical Data Sheet**

Catalog Number:	128-12
Source:	<i>Escherichia coli</i> .
Molecular Weight:	Approximately 29.8 kDa, a homodimeric protein consisting of two 146 amino acid non-glycosylated polypeptide chains.
Quantity:	2µg/10µg/1000µg
AA Sequence:	TALAGTRGAQ GSGGGGGGGG GGGGGGGGGG GGAGRGHGRR GRSRCSRKSL HVDFKELGWD DWIAPLDYE AYHCEGVCDF PLRSHLEPTN HAIQTLNS MAPDAAPASC CVPARLSPIS ILYIDAANNV VYKQYEDMVV EACGCR
Purity:	> 95 % by SDS-PAGE and HPLC analyses.
Biological Activity:	Fully biologically active when compared to standard. The ED ₅₀ as determined by inducing alkaline phosphatase production of murine ATDC5 cells is less than 0.5 µg/ml, corresponding to a specific activity of > 2000 IU/mg.
Physical Appearance:	Sterile Filtered White lyophilized (freeze-dried) powder.
Formulation:	Lyophilized from a 0.2 µm filtered concentrated solution in 30 % Acetonitrile and 0.1 % TFA.
Endotoxin:	Less than 0.1 EU/µg of rMuGDF-7/BMP-12 as determined by LAL method.
Reconstitution:	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1 % BSA 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.
Shipping:	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage:	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none">● 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.
Usage:	This material is offered by Shanghai PrimeGene Bio-Tech for research, laboratory or further evaluation purposes. NOT FOR HUMAN USE.

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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.