

**Recombinant Human Growth Differentiation
Factor 5/Bone Morphogenetic Protein-14
(rHuGDF-5/BMP-14)
ChemWhat Technical Data Sheet (TDS)**

Catalog Number:	108-14
Source:	<i>Escherichia coli</i> .
Molecular Weight:	Approximately 27.1 kDa, a disulfide-linked homodimeric protein containing two 120 amino acids.
Quantity:	10µg/50µg/1000µg
AA Sequence:	APLATRQGKR PSKNLKARCS RKALHVNFKD MGWDDWIIAP LEYEAHFHCEG LCEFPLRSHL EPTNHAVIQT LMNSMDPEST PPTCCVPTRL SPISILFIDS ANNVVYKQYE DMVVESCGCR
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 1.0 µg/ml, corresponding to a specific activity of > 1000 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 rHuGDF-5/BMP-14 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 4 mM HCl to a concentration of 0.1-1.5 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:	ChemWhat Limited in UK offers this branded product for research, development or further evaluation purposes. NOT FOR HUMAN USE.

Human Growth Differentiation Factor 5/Bone Morphogenetic Protein-14

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.