

ChemWhat Technical Data Sheet (TDS)

Catalog Number:	144-21
Source:	<i>Escherichia coli</i> .
Molecular Weight:	Approximately 19.7 kDa, a single non-glycosylated polypeptide chain containing 180 amino acids.
Quantity:	5µg/25µg/1000µg
AA Sequence:	AYPISDSSPL LQFGGQVRQR YLYTDDDQDT EAHLEIREDG TVVGT AHRSP ESLLELKALK PGVIQILGVK ASRFLCQQPD GTLYGSPHFD PEACSFRELL LKDGYNVYQS EAHGLPLRLP QKDSQDPATR GPVRFPLMPG LPHEPQE QPG VLPPEPPDVG SSDPLSMVEP LQGRSPSYAS
Purity:	> 95 % by SDS-PAGE and HPLC analyses.
Biological Activity:	Fully biologically active when compared to standard. The ED ₅₀ as determined by thymidine uptake assay using FGF-receptors transfected BaF3 cells is less than 0.5 µg/ml, corresponding to a specific activity of > 2.0 × 10 ³ IU/mg in the presence of 5 µg/ml of rMuKlotho-β and 10 µg/ml of heparin.
Physical Appearance:	White lyophilized powder.
Formulation:	Lyophilized from a 0.2 µm filtered concentrated solution in PBS, 500 mM NaCl, pH 7.4.
Endotoxin:	Less than 1EU/µg of rRtFGF-21 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:	ChemWhat Limited in UK offers this branded product for research, development or further evaluation purposes. NOT FOR HUMAN USE.

Rat Fibroblast Growth Factor-21

Fibroblast growth factor 21 (FGF-21) encoded by the FGF-21 gene belongs to the large FGF family and it is specifically induced by HMGCS2 activity. In mice, brown adipose tissue becomes a source of systemic FGF-21 after cold exposure. FGF-21 stimulates glucose uptake in differentiated adipocytes via the induction of glucose transporter SLC2A1/GLUT1 expression (but not SLC2A4/GLUT4 expression) and the activity depends on the presence of KLB. Recombinant rat FGF-21 contains 180 amino acids residues and show limited binding to heparin. In addition, rat FGF-21 respectively shows 81 % and 92 % a.a. identity to human and murine FGF-21, and it show activity on murine and human cells.