

## PrimeGene Technical Data Sheet

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<b>Catalog Number:</b>	144-21
<b>Source:</b>	<i>Escherichia coli</i> .
<b>Molecular Weight:</b>	Approximately 19.7 kDa, a single non-glycosylated polypeptide chain containing 180 amino acids.
<b>Quantity:</b>	5µg/25µg/1000µg
<b>AA Sequence:</b>	AYPISDSSPL LQFGGQVRQR YLYTDDDQDT EAHLEIREDG TVVGTahrSP ESLLELKALK PGVIQILGVK ASRFLCQQPD GTLYGSPHFD PEACSFRELL LKDGYNVYQS EAHGLPLRLP QKDSQDPATR GPVRFPLMPG LPHEPQEQPG VLPPEPPDVG SSDPLSMVEP LQGRSPSYAS
<b>Purity:</b>	> 95 % by SDS-PAGE and HPLC analyses.
<b>Biological Activity:</b>	Fully biologically active when compared to standard. The ED <sub>50</sub> 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 <sup>3</sup> IU/mg in the presence of 5 µg/ml of rMuKlotho-β and 10 µg/ml of heparin.
<b>Physical Appearance:</b>	White lyophilized powder.
<b>Formulation:</b>	Lyophilized from a 0.2 µm filtered concentrated solution in PBS, 500 mM NaCl, pH 7.4.
<b>Endotoxin:</b>	Less than 1EU/µg of rRtFGF-21 as determined by LAL method.
<b>Reconstitution:</b>	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.
<b>Shipping:</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
<b>Stability &amp; Storage:</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"><li>● 12 months from date of receipt, -20 to -70 °C as supplied.</li><li>● 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li><li>● 3 months, -20 to -70 °C under sterile conditions after reconstitution.</li></ul>
<b>Usage:</b>	This material is offered by Shanghai PrimeGene Bio-Tech for research, laboratory or further evaluation purposes. <b>NOT FOR HUMAN USE.</b>

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### ***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.