

## Prime Gene Recombinant Murine Fibrobalst Growth Factor-21 (rMuFGF-21)

## **PrimeGene Technical Data Sheet**

124-21 **Catalog Number:** 

Source: Escherichia coli.

Molecular Weight: Approximately 19.9 kDa, a single non-glycosylated polypeptide chain containing 182 amino acids.

**Quantity:**  $5\mu g/25\mu g/1000\mu g$ 

**AA Sequence:** AYPIPDSSPL LQFGGQVRQR YLYTDDDQDT EAHLEIREDG TVVGAAHRSP ESLLELKALK

> PGVIQILGVK ASRFLCQQPD GALYGSPHFD PEACSFRELL LEDGYNVYQS EAHGLPLRLP QKDSPNQDAT SWGPVRFLPM PGLLHEPQDQ AGFLPPEPPD VGSSDPLSMV EPLQGRSPSY

**Purity:** > 97 % by SDS-PAGE and HPLC analyses.

**Biological Activity:** 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  $> 2.0 \times 10^3$  IU/mg in the presence of 5 µg/ml of rMuKlotho- $\beta$  and 10 µg/ml of heparin.

Sterile Filtered White lyophilized (freeze-dried) powder. Physical Appearance:

Formulation: Lyophilized from a 0.2  $\mu$ m filtered concentrated solution in 3  $\times$  PBS, pH 7.4.

**Endotoxin:** Less than 1 EU/µg of rMuFGF-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  $\leq$  -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.

Use a manual defrost freezer and avoid repeated freeze-thaw cycles. **Stability & Storage:** 

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.

## Murine Fibroblast Growth Factor-21

Fibroblast growth factor-21 (FGF-21) belongs to the large FGF family and it is specifically induced by HMGCS2 activity. In mice, brown adipose tissue becomes a source of systemic FGF21 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. FGF-21, in the presence of betaKlotho as a protein cofactor, signals through the FGFR 1c and 4 receptors. Recombinant murine FGF-21 contains 182 amino acids residues and show limited binding to heparin. In addition, Murine FGF-21 respectively shows 81 % and 92 % a.a. identity to human and rat FGF-21, and it show activity on human and rat cells.

Rev. 08/20/2018 V.3 Shanghai PrimeGene Bio-Tech Co., Ltd.

Email: info.pg@bio-techne.com Website: www.primegene.com.cn Website: www.primegene.com Tel: +86 21 52380373 Fax: +86 21 61077348