FGF21
Recombinant Mouse Fibroblast Growth Factor-21

Catalog No.	CS492A	**Quantity:**	5 µg
	CS492B		25 µg
	CS492C		1 mg

Description: 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 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. FGF-21, in the presence of betaKlotho as a protein cofactor, signals through the FGFR 1c and 4 receptors.

Recombinant mouse FGF-21 contains 182 amino acid residues and shows limited binding to heparin. In addition, Mouse FGF-21 respectively shows 81% and 92% aa identity to human an rat FGF-21, and it shows activity on human and rat cells.

Recombinant Mouse Fibroblast Growth Factor-21 is single non-glycosylated polypeptide chain containing 182 amino acids.

Gene ID: 56636

Source: *E. coli*

Molecular Weight: ~19.9 kDa

Formulation: Lyophilized from a 0.2 µm filtered concentrated solution in 3 x PBS, pH 7.4.

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

Endotoxin Level: <1 EU/µg as determined by LAL method.

Biological Activity: Fully biologically active when compared to standard. The ED_{50} determined by a cell proliferation assay using mouse NIH/3T3 cells is less than 600 ng/ml, corresponding to a specific activity of $>1.7 \times 10^3$ IU/mg in the presence of 5 µg/ml of recombinant Mouse Klotho-β.

Specific Activity: $>1.7 \times 10^3$ IU/mg

Amino Acid Sequence: AYPIPDSSPL LQFGGQVRQR YLYTDDDQDT EAHLEIREDG TVVGAAHRSP ESLLELKALK PGVIQILGVK ASRFLCQQPD GALYGSPHFD PEACSFRELL LEDGYNVYQS EAHGLPLRLP QKDSPNQDAT SWGPVRFLPM PGLLHEPQDQ AGFLPPEPPD VGSSDPLSMV EPLQGRSPSY AS

Reconstitution: **Centrifuge vial prior to opening.** Add sterile distilled water or aqueous buffer to a concentration of 0.1-1.0 mg/ml. Further dilutions should be made in appropriate buffered solutions.

Storage & Stability: The lyophilized protein is stable at 2-8°C. Upon receipt, store desiccated at -20°C. After reconstitution, the preparation is stable for up to one week at 2-8°C. For maximal stability, apportion the reconstituted preparation into working aliquots and store at -20°C to -80°C. For long term storage of reconstituted protein, it is recommended that a carrier protein such as 0.1% BSA or HSA be added. This depends on the particular application. **Avoid repeated freeze/thaw cycles.**

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