www.neobiolab.com
info@neobiolab.com
888.754.5670, +1 617.500.7103 United States
0800.088.5164, +44 020.8123.1558 United Kingdom

FGF 21 Rat

Description:FGF 21 Rat Recombinant produced in E.Coli is a single, non-glycosylated polypeptide chain containing 180 amino acids and having a molecular mass of 19.7kDa. The FGF 21 is purified by proprietary chromatographic techniques.

Synonyms: Fibroblast growth factor 21, FGF-21.

Source: Escherichia Coli.

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

Amino Acid Sequence:AYPISDSSPL LQFGGQVRQR YLYTDDDQDT EAHLEIREDG TVVGTAHRSP ESLLELKALK PGVIQILGVK ASRFLCQQPD GTLYGSPHFD PEACSFRELL LKDGYNVYQS EAHGLPLRLP QKDSQDPATR GPVRFLPMPG LPHEPQEQPG VLPPEPPDVG SSDPLSMVEP LQGRSPSYAS

Purity: Greater than 95.0% as determined by:(a) Analysis by RP-HPLC.(b) Analysis by SDS-PAGE.

Formulation:
Lyophilized from a 0.2

Stability:
Lyophilized FGF 21 althoμgh stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution FGF 21 should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

Usage:
NeoBiolab products are furnished for LABORATORY RESEARCH USE ONLY. The products may not be used as drμgs, agricultural or pesticidal products, food additives or household chemicals.

Solubility:
It is recommended to reconstitute the lyophilized FGF 21 Rat Recombinant in sterile 18M-cm H2O not less than 100

Introduction:
The FGFs are a family of more than 20 small (~1726 kDa) secreted peptides. The initial characterization of these proteins focused on their ability to stimulate fibroblast proliferation. This mitogenic activity was mediated throμgh FGF receptors (FGFRs) 1, 2, or 3. A fourth closely related tyrosine kinase receptor (FGFR4) was able to bind the FGFs but did not lead to a mitogenic response.FGFs modulate cellular activity via at least 5 distinct subfamilies of high-affinity FGF receptors (FGFRs): FGFR-1, -2, -3, and -4, all with intrinsic tyrosine kinase activity and, except for FGFR-4, multiple splice isoforms, and FGFR-5, which lacks an intracellular kinase domain. There is growing evidence that FGFRs can be important for regulation of glucose and lipid homeostasis. The overexpression of a dominant negative form of FGFR-1 in cells leads to diabetes in mice, which thus implies that proper FGF signaling is required for normal cell function and glycemia maintenance. FGFR-2 appears to be a key molecule during pancreatic development. Moreover, FGFR-4 has been implicated in cholesterol metabolism and bile acid synthesis.FGF-19, has been

shown to cause resistance to diet-induced obesity and insulin desensitization and to improve insulin, glucose, and lipid profiles in diabetic rodents. Since these effects, at least in part, are mediated throμgh the observed changes in metabolic rates, FGF-19 can be considered as a regulator of energy expenditure.FGF-21 is preferentially expressed in liver, but an exact knowledge of FGF-21 bioactivity and its mode of action have been lacking to date. FGF-21 is a potent activator of glucose uptake on adipocytes, protects animals from diet-induced obesity when overexpressed in transgenic mice, and lowers blood glucose and triglyceride levels when therapeutically administered to diabetic rodents.

Catalog #:CYPS-137

For research use only.

Biological Activity:

Fully biologically active when compared to standard. The ED50 determined by a cell proliferation assay using murine NIH/3T3 cells is less than 700 ng/ml, corresponding to a specific activity of > 1.4

To place an order, please Click HERE.