Rev07
Update: Sep,11,2025

DATASHEET

FGF-21, Human

Cat. No.: Z03157

Product Introduction

Species	Human
Protein Construction	Expressed with an N-terminal Gly **FGF-21 (His29-Ser209) Accession # Q9NSA1**
Purity	> 95% as analyzed by SDS-PAGE > 95% as analyzed by HPLC
Endotoxin Level	< 0.2 EU/μg of protein by gel clotting method
Biological Activity	ED_{50} < 0.5 μg/ml, measured by a cell proliferation assay using NIH-3T3 cells in the presence of 1.25 μg/ml mouse Klotho and 10 μg/ml heparin, corresponding to a specific activity of > 2.0×10^3 U/mg.
Expression System	E. coli
Apparent Molecular Weight	~19.5 kDa, on SDS-PAGE under reducing conditions.
Formulation	Lyophilized after extensive dialysis against PBS.
Reconstitution	It is recommended that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute the lyophilized powder in ddH_2O up to 100 μg/ml.
Storage & Stability	Upon receiving, this product remains stable for 6 months at lower than -70°C. Upon reconstitution, the product should be stable for 1 week at 4°C or for 3 months at -20°C. For long term storage it is recommended that a carrier protein (example 0.1% BSA) be added. Avoid repeated freeze-thaw cycles.

Background

Target Background : Fibroblast Growth Factor-21 (FGF-21) is a metabolic cytokine belonging to the heparin-binding FGF family. Along with FGF-19/15 and FGF-23, FGF-21 is categorized as a member of the atypical FGF subfamily, as it must be complexed to the Klotho co-receptor in order to bind to the FGF receptors and activate the downstream signaling pathway. In vivo FGF-21 is expressed in liver, pancreas, adipose tissue, and skeletal muscle, and it plays a central role in the energy metabolism. The expression of FGF-21 is stimulated by free fatty acids and insulin resistant states and is correlated with whole-body insulin resistance. FGF-21 activates glucose uptake in adipocytes and increases insulin sensitivity, implicating it as a novel target with potential anti-diabetic properties.

Synonyms : FGF21; fibroblast growth factor-21; FGFL

For laboratory research use only. Direct human use, including taking orally and injection and clinical use are forbidden.

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