Recombinant Human Fibroblast Growth Factor 21 (FGF-21)

Catalog Number: OM770038

Storage Temperature: Store at -20°C or below, protected from light.
Source: Recombinant human fibroblast growth factor 21 is produced by genetic engineering and expressed in Escherichia coli.

Product Introduction

FGF-21 is a newly discovered metabolic regulator in the body and belongs to the fibroblast growth factor family. FGF-21 was first discovered and isolated from mouse embryos. It is a secreted protein composed of 210 amino acids, with a 30-amino-acid signal peptide at its hydrophobic end. Human FGF-21 is also composed of 210 amino acids, with a 28-amino-acid signal peptide at its amino-terminal end. The human FGF-21 protein has a high homology with the mouse FGF-21 protein, with approximately 75% of the amino acid sequences being identical. The FGF-21 produced by our company contains 181 amino acids, has a molecular weight of approximately 19.5 kDa, and an isoelectric point of 5.24. It has the same structure as the natural mature FGF-21 and exhibits good biological activity.

Product Characteristics

Item	Standard	Method
Appearance	White, off-white, or light yellow powder	Visual inspection
Purity (HPLC)	≥90%	SDS-PAGE electrophoresis
Bacterial Endotoxin	≤10 EU/mg	Pharmacopoeia testing method
Residual Exogenous DNA Content	≤10 ng/mg	Pharmacopoeia testing method
Molecular Weight	19.5 kDa	SDS-PAGE electrophoresis

Storage and Transportation Stability

When stored conventionally at ≤ -20°C, the activity remains unchanged for 1 year.
After thawing, under aseptic conditions (2 - 8°C), the activity remains basically unchanged for 1 month.

Product Advantages

Animal-free: Produced by recombinant technology, free from exogenous virus contamination, and no animal-derived raw materials are used in the production process.
Stable Quality: Mass production (10+g - level production and supply) ensures stable and continuous batch production; there is no difference between product batches, and the quality is stable.
High Purity: High specific activity; host protein residues are less than the limit requirements for biological products.
Lyophilized Powder: Easy to store and transport.
Compliance with Regulatory Requirements: The production equipment and production environment meet relevant regulatory requirements, and the production process fully complies with GMP guidelines.

Product Usage and Recommendations

When dissolving: It is recommended to dissolve in PBS, with a dissolution concentration not exceeding 5 mg/ml. Prepare it for immediate use.