

Rev03
Update: Dec,14,2021

DATASHEET

FGF-6, Human

Cat. No.: Z03164

Product Introduction

Species	Human
Protein Construction	Expressed with an N-terminal Met. FGF-6 (Gly41-Ile208) Accession # P10767
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 < 2.5 ng/ml, measured by a cell proliferation assay using 3T3 cells in the presence 1.0 μg/ml heparin, corresponding to a specific activity of > 4.0 × 10 ⁵ units/mg.
Expression System	E. coli
Apparent Molecular Weight	~18.8 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 ₂ O up to 100 μg/ml.
Storage & Stability	Upon receiving, this product remains stable for up to 6 months at lower than -70°C. Upon reconstitution, the product should be stable for up to 1 week at 4°C or up to 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-6 (FGF-6) is a cytokine belonging to the heparin-binding FGF family, and is structurally related to other members of FGF family, particularly FGF-4. In vivo, FGF-6 exhibits an expression profile predominantly restricted to the myogenic lineage, and it preferentially binds to two of the FGF receptors: FGFR1 and FGFR4. FGF-6 functions in muscle regeneration, myoblast proliferation and migration, and muscle differentiation in a dose-dependent manner. In vivo high concentration of recombinant FGF-6 up-regulates and down-regulates FGFR1 and FGFR4, respectively, as FGFR1 promotes the proliferation while FGFR4 promotes the differentiation in the muscle. Besides its dual function in muscle regeneration, FGF-6 may act as a regulator of bone metabolism as well.

Synonyms : Fibroblast Growth Factor-6; HBGF-6; HST-2

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