

Rev03 DATASHEET

Update: Dec,14,2021

FGF-12, Human

Cat. No.: Z03129

Product Introduction

Species	Human
Protein Construction	FGF-12 (Met1-Thr181) Accession # P61328-2
Purity	> 95% as analyzed by SDS-PAGE > 95% as analyzed by HPLC
Endotoxin Level	< 1 EU/µg of protein by LAL method
Biological Activity	Immobilized Human FGF-12 at 2.0 μ g/ml (100 μ l/well) can bind Human FGFR3-Fc. The ED $_{50}$ of Human FGF-12 is 0.5-4.0 μ g/ml.
Expression System	E. coli
Apparent Molecular Weight	~19 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 or PBS up to 100 μ g/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-12(FGF-12) is a heparin binding cytokine belonging to the FGF family. FGF-12 along with FGF-11, -13, and -14, form a sublineage within the FGF family: in contrast to the other members, they are all intracellular signaling proteins lacking signal peptides and containing a flanking domain beside the family conserved β -trefoil domain. FGF-12 is expressed in the cartilaginous skeleton and heart, suggesting a role in the development of connective tissue and heart. In vivo, FGF-12 binds to Islet Brain-2 and Voltage-Gated Sodium Channels (VGSC), and plays a critical role in the membrane targeting and function of VGSC. FGF-12 has been implicated in heart diseases such as cardiac arrhythmias.

Synonyms: FHF1; FGF12B



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