

# PRODUCT DATA SHEET



Bioworld Technology, Inc.

## Recombinant FGF-12, Human

Catalog Number: BK0035-10µg

Source: Escherichia coli.

Quantity: 10µg

### Description:

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  $\beta$ -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. Recombinant human Fibroblast Growth Factor-12 (rhFGF-12) produced in E.coli is a single non-glycosylated polypeptide chain containing 181 amino acids. A fully biologically active molecule, rhFGF-12 has a molecular mass of 20.4 kDa analyzed by reducing SDS-PAGE and is obtained by proprietary chromatographic techniques at GenScript.

### Molecular Weight:

20.4 kDa, observed by reducing SDS-PAGE.

### Purity:

> 95% as analyzed by SDS-PAGE and HPLC.

### Biological Activity:

ED50 < 20 ng/ml, measured by its binding ability in a functional ELISA with immobilized rhFGF R4/Fc Chimera, corresponding to a specific activity of >  $5 \times 10^4$  units/mg.

### Physical Appearance:

Sterile Filtered White lyophilized (freeze-dried) powder.

### Formulation:

Lyophilized after extensive dialysis against PBS.

### AA Sequence:

MES-  
KEPQLKGIVTRLFSQQGYFLQMHPDGTIDGTK-  
DENS DYTLFNLIPVGLRVVAIQGV-  
KASLYVAMNGEGYLYS-  
SDVFTPECKFKESVFENYYVIYSSTLYRQQESGR  
AWFLGLNKEGQIMKGNRVKKT KPSSHFPK-  
PIEVCMYREPSLHEIGEKGGRS-  
RKSSGTPTMNGGKVVNQDST

### Endotoxin:

< 0.2 EU/µg, determined by LAL method.

### Reconstitution:

Reconstituted in ddH<sub>2</sub>O or PBS at 100 µg/ml.

### Storage:

Lyophilized recombinant human Fibroblast Growth Factor-12 (rhFGF-12) remains stable up to 6 months at -80 °C from date of receipt. Upon reconstitution, rhFGF-12 remains stable up to 2 weeks at 4 °C or up to 3 months at -20 °C.

### Usage:

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