

#### FGF-6

Catalog # PVGS1365

## **Specification**

#### **FGF-6 - Product Information**

Primary Accession **Species** Human

P10767

#### **Sequence**

Gly41-Ile208, expressed with an N-terminal Met

## **Purity**

> 95% as analyzed by SDS-PAGE<br/>br>> 95% as analyzed by HPLC

#### **Endotoxin Level**

< 0.2 EU/  $\mu g$  of protein by gel clotting method

## **Biological Activity**

ED<sub>50</sub> < 2.5 ng/ml, measured by a cell proliferation assay using 3T3 cells in the presence 1.0  $\mu$ g/ml heparin, corresponding to a specific activity of > 4.0 × 10<sup>5</sup> units/mg.

# **Expression System**

E. coli

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  $100 \mu g/ml$ .

# 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.

## **FGF-6 - Additional Information**

## **Gene ID 2251**

# **Other Names**

Fibroblast growth factor 6, FGF-6, Heparin secretory-transforming protein 2, HST-2, HSTF-2, Heparin-binding growth factor 6, HBGF-6, FGF6, HST2, HSTF2

# **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.

## **FGF-6 - Protein Information**

Name FGF6

Synonyms HST2, HSTF2

## **Function**

Plays an important role in the regulation of cell proliferation, cell differentiation, angiogenesis and myogenesis, and is required for normal muscle regeneration.

# **Cellular Location**

Secreted, extracellular space.

#### **Tissue Location**

Leukemia cell lines with platelet/ megakaryocytic differentiation potential

## **FGF-6 - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# FGF-6 - Images