

# Technical Data Sheet

## **Flogen<sup>®</sup> Recombinant Human Fibroblast Growth Factor-4 (rHuFGF-4)**

<b>Catalog Number:</b>	PGR0104-004
<b>Source:</b>	<i>Escherichia coli</i> .
<b>Molecular Weight:</b>	Approximately 19.8 kDa, a single nonglycosylated polypeptide chain containing 182 amino acids.
<b>Quantity:</b>	5µg/25µg/1000µg
<b>AA Sequence:</b>	GRGGAAAPTA PNGTLEAELE RRWESLVALS LARLPVAAQP KEAAVQSGAG DYLLGIKRLR RLYCNVIGIF HLQALPDGRI GGAHADTRDS LLELSPVERG VVSIFGVASR FFVAMSSKGK LYGSPFFTDE CTFKEILLPN NYNAYESYKY PGMFIALSKN GKTKKGNRVS PTMKVTHFLP RL
<b>Purity:</b>	> 96 % by SDSPAGE and HPLC analyses.
<b>Biological Activity:</b>	Fully biologically active when compared to standard. The ED50 as determined by thymidine uptake assay using FGFreceptors transfected BaF3 cells is less than 0.5 ng/ml, corresponding to a specific activity of > 2.0 × 10 <sup>6</sup> IU/mg.
<b>Appearance:</b>	Sterile Filtered White lyophilized (freeze-dried) powder.
<b>Formulation:</b>	Lyophilized from a 0.2 µm filtered concentrated solution in 1 × PBS, pH 7.4, 300 mM NaCl.
<b>Endotoxin:</b>	Less than 1 EU/µg of rHuFGF4 as determined by LAL method.
<b>Reconstitution:</b>	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1 % BSA to a concentration of 0.11.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at ≤ 20 °C. Further dilutions should be made in appropriate buffered solutions.
<b>Storage:</b>	This lyophilized preparation is stable at 28 °C, but should be kept at 20 °C for long term storage, preferably desiccated. Upon reconstitution, the preparation is stable for up to one week at 28 °C. For maximal stability, apportion the reconstituted preparation into working aliquots and store at 20 °C to 70 °C. <b>Avoid repeated freeze/thaw cycles.</b>
<b>Usage:</b>	This material is for research, laboratory or further evaluation purposes. <b>NOT FOR HUMAN USE.</b>

### **Human Fibroblast Growth Factor-4**

FGF4, also named FGFK and KFGF, belongs to the fibroblast growth factor (FGF) family. By signaling through the FGF R1c, 2c, 3c and 4 receptors, FGF4 has functions that maintain a population of progenitor cells in the epiblast that generates mesoderm, and contribute to the stem cell population that is incorporated in the tailbud. It is also required for axial elongation of the mouse embryo after gastrulation. Mature human FGF4 (71206 a.a.) shares 91 %, 82 %, 94 % and 91 % a.a. identity with murine, rat, canine and bovine FGF4. Additionally, FGF4 shares about 30 % sequence identity with the prototypical members of the FGF family.