

**Recombinant Human Fibroblast Growth Factor-19  
(rhFGF-19)  
Catalog Number: 104-19**

<b>Description</b>	Fibroblast growth factor 19 (FGF-19) belongs to the large FGF family which has at least 23 members. However, FGF-19, along with FGF-21 and FGF-23, belongs to a subfamily of atypical FGFs where it lacks a conventional heparin-binding motif. Therefore, its signal transduction is mediated by the cofactor $\beta$ Klotho when interacting with FGFRs 1c, 2c and 3c. Interestingly, FGF-19 can interact directly with FGFR4 in absence of $\beta$ Klotho. FGF-19 regulates metabolic processes including bile acid, lipid and glucose homeostasis, as well as hepatocyte proliferation. Administration of recombinant FGF-19 to mice decreased cholesterol 7-alpha-hydroxylase (CYP7A1) expression, the rate limiting step in bile acid biosynthesis pathway in the liver.
<b>Synonyms</b>	FGF19
<b>AA Sequence</b>	MRPLAFSDAG PHVHYGWGDP IRLRHLYTSG PHGLSSCFLR IRADGVVDCA RGQSAHSLLE IKAVALRTVA IKGVHSVRYL CMGADGKMQG LLQYSEEDCA FEEEIRPDGY NVYRSEKHRL PVSLSAKQR QLYKNRGFLP LSHFLPMLPM VPEEPEDLRG HLESDFMFSSP LETDSMDPFG LVTGLEAVRS PSFEK
<b>Source</b>	<i>Escherichia coli</i>
<b>Molecular Weight</b>	Approximately 21.8 kDa, a single non-glycosylated polypeptide chain containing 195 amino acids.
<b>Purity</b>	>95% by SDS-PAGE and HPLC analyses.
<b>Biological Activity</b>	Fully biologically active. The ED <sub>50</sub> is 100- 150ng/ml, as determined by proliferation of BALB/c 3T3 cells.
<b>Physical Appearance</b>	White lyophilized powder.
<b>Formulation</b>	Lyophilized from a 0.2 $\mu$ m filtered concentrated solution in PBS, pH 7.4.
<b>Endotoxin</b>	< 1EU/ $\mu$ g of growth factor as determined by LAL method.
<b>Reconstitution</b>	Reconstitute in sterile distilled water containing 0.1% BSA to a concentration of 0.1-1.0 mg/mL.
<b>Storage</b>	Store at -20°C after receiving. Upon reconstitution, store at 2-8°C for up to one week. For maximal stability, aliquot and store at -20°C. Avoid repeated freeze/ thaw cycles.
<b>Usage</b>	This product is for research use only. It is not approved for use in humans, animals, or <i>in vitro</i> diagnostic procedures.