

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

Description	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 β Klotho when interacting with FGFRs 1c, 2c and 3c. Interestingly, FGF-19 can interact directly with FGFR4 in absence of β 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.
Synonyms	FGF19
AA Sequence	MRPLAFSDAG PHVHYGWGDP IRLRHLYTSG PHGLSSCFLR IRADGVVDCA RGQSAHSLLE IKAVALRTVA IKGVHVRYL CMGADGKMQG LLQYSEEDCA FEEEIRPDGY NVYRSEKHRL PVSLSAKQR QLYKNRGFLP LSHFLPMLPM VPEEPDLRG HLESDFSSP LETDSMDPFG LVTGLEAVRS PSFEK
Source	<i>Escherichia coli</i>
Molecular Weight	Approximately 21.8 kDa, a single non-glycosylated polypeptide chain containing 195 amino acids.
Purity	>95% by SDS-PAGE and HPLC analyses.
Biological Activity	Fully biologically active. The ED ₅₀ is 100- 150ng/ml, as determined by proliferation of BALB/c 3T3 cells.
Physical Appearance	White lyophilized powder.
Formulation	Lyophilized from a 0.2 μ m filtered concentrated solution in PBS, pH 7.4.
Endotoxin	< 1EU/ μ g of growth factor as determined by LAL method.
Reconstitution	Reconstitute in sterile distilled water containing 0.1% BSA to a concentration of 0.1-1.0 mg/mL.
Storage	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.
Usage	This product is for research use only. It is not approved for use in humans, animals, or <i>in vitro</i> diagnostic procedures.