

# Recombinant Human Fibroblast Growth Factor-19 (rh FGF-19)

**Synonyms:** none.

**Introduction:** FGF-19 is a heparin binding growth factor belonging to the FGF family. FGF family members possess broad mitogenic and cell survival activities, and are involved in a variety of biological processes, including embryonic development, cell growth, morphogenesis, tissue repair, tumor growth and invasion. FGF-19, has been shown to cause resistance to diet-induced obesity and insulin desensitization and to improve insulin, glucose, and lipid profiles in diabetic rodents. Since these effects, at least in part, are mediated through the observed changes in metabolic rates, FGF-19 can be considered as a regulator of energy expenditure.

**Description:** Recombinant human Fibroblast Growth Factor-19 produced in E.Coli is a single, non-glycosylated polypeptide chain containing 195 amino acids and having a molecular mass of 21.8 kDa. The rh FGF-19 is purified by chromatographic techniques.

**Source:** *Escherichia Coli*.

**Physical Appearance:** Sterile filtered white lyophilized (freeze-dried) powder.

**Formulation:** lyophilized from 0.2 µm filtered solution in 25 mM Na<sub>2</sub>HPO<sub>4</sub>, 300mM NaCl, pH 8

**Solubility:** It is recommended to reconstitute the lyophilized rh FGF-19 in sterile water not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.

**Stability:** Lyophilized rh FGF-19, although stable at room temperature for 3 weeks, should be stored desiccated below -18° C. Upon reconstitution rh FGF-19 should be stored at 4° C between 2-7 days and for future use below -18° C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

**Purity:** 95% (verified by SDS-PAGE / silver stain)

**Amino Acid Sequence:** MRPLAFSDAG PHVHYGWGDP IRLRHLYTSG PHGLSSCFLR IRADGVVDCA  
RGQSAHSLL E IKAVALRTVA IKGVHSVRYL CMGADGKMQG LLQYSEEDCA FEEEIRPDGY NVYRSEKHRL  
PVSLSSAKQR QLYKNRGLFL LSHFLPMLPM VPEEPEDLRG HLESDMFSSP LETDSMDPFG LVTGLEAVRS  
PSFEK

**Biological Activity:** Determined by the dose dependent proliferation of mouse BALB/3T3 cells the ED50 is 100 – 150 ng/ml.

**Endotoxicity:** The endotoxin level is less than 1 EU / µg determined by LAL method.

This material is offered for **research use only**. Not for use in human. For in vitro use only. ImmunoTools will not be held responsible for patent infringement or other violations that may occur with the use of our products.

<i>small</i>	5 µg	Cat.N°	11345020
<i>medium</i>	25 µg	Cat.N°	11345024
<i>large</i>	100 µg	Cat.N°	11345026
<i>x-large</i>	500µg	Cat.N°	11345027

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