

Recombinant Rat Basic Fibroblast Growth Factor

(rrbFGF)

Catalog Number: 144-02

Description

Basic Fibroblast Growth Factor (bFGF) is a member of the FGF family of mitogenic peptides which is comprised of at least 22 proteins. FGF signaling factors play a central role during prenatal development and postnatal growth and regeneration of a variety of tissues, by promoting cellular proliferation and differentiation. bFGF is a non-glycosylated heparin binding growth factor that is expressed in the brain, pituitary, kidney, retina, bone, testis, adrenal gland liver, monocytes, epithelial cells and endothelial cells. bFGF signals through FGF receptor 1b, 1c, 2c, 3c and 4.

Synonyms FGF-2, Fibroblast Growth Factor-basic

AA Sequence PALPEDGGGA FPPGHFKDPK RLYCKNGGFF LRIHPDGRVD GVREKSDPHV

KLQLQAEERG VVSIKGVCAN RYLAMKEDGR LLASKCVTEE CFFFERLESN

NYNTYRSRKYSSWYVALKRT GQYKLGSKTG PGQKAILFLP MSAKS

Source Escherichia coli

Molecular Weight Approximately 16.3 kDa, a single non-glycosylated polypeptide chain containing 145 amino

acids.

Purity >98% by SDS-PAGE and HPLC analyses.

Biological Activity Fully biologically active. The ED₅₀ is ≤ 0.2 ng/ml, corresponding to a specific activity of ≥ 5 x

10⁶ units/mg, as determined by proliferation of BALB/c 3T3 cells

Physical Appearance White lyophilized powder.

Formulation Lyophilized from a 0.2µm filtered solution in PBS, pH 7.4.

Endotoxin $< 1EU/\mu g$ 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 *in vitro*

diagnostic procedures.