



Recombinant Human FGF-basic (rhFGF-b)

10 µg, Catalog Number 2052

50 µg, Catalog Number 2062

Description

FGF-basic is one of 23 known members of the FGF family. Proteins of this family play a central role during prenatal development and postnatal growth and regeneration of a variety of tissues, by promoting cellular proliferation and differentiation. FGF-basic 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. FGF-basic signals through FGFR 1b, 1c, 2c, 3c and 4. Recombinant human FGF-basic is a 17.2 kDa protein consisting of 154 amino acid residues.

AA Sequence

AAGSITTLPA LPEDGGSGAF PPGHFKDPKR LYCKNGGFFL RIHPDGRVDG
VREKSDPHIK LQLQAEERGV VSIKGVCANR YLAMKEDGRL LASKCVTDEC
FFFERLESNN YNTYRSRKYT SWYVALKRTG QYKLGSKTGP GQKAILFLPM SAK

Source

E. Coli.

Purity

Greater than 95% by SDS-PAGE gel and HPLC analysis.

Endotoxin Level

Endotoxin level is less than 0.1 ng per µg (1EU/µg).

Reconstitution:

Centrifuge the vial prior to opening. It is recommended to reconstitute in sterile DPBS containing a carrier protein (example 0.1% BSA) to a concentration of 0.1-1.0 mg/ml. *Do not vortex*. Store the working aliquots at -20°C to -80°C.

Stability

The lyophilized protein is stable for at least 2 years from the date of receipt.

Storage

-20°C

Biological Activity

Assay #1: Measured by its ability to stimulate proliferation of NIH3T3 cells. The ED₅₀ of this effect is less than 0.1 ng/ml.

Assay #2: Measured by its ability to stimulate proliferation of human primary cells (HUVEC, ScienCell, cat. no. 8000). The ED₅₀ of this effect is less than 0.1 ng/ml.

Product Use

For research use only. It is not approved for human or animal use, or for application in *in vitro* diagnostic procedures.

Reference

1. Derivation of pluripotential embryonic stem cells from murine primordial cells in culture. *Cell* 70 (5), 841-847 (1992).
2. Differentiation of human embryonic stem cells into insulin-producing clusters. *Stem Cells* 22(3), 265-274 (2002).