

FGF-basic, Rat

Cat. No.: Z02786-50

Size: 50.0 ug

Synonyms: Fibroblast Growth Factor-basic (FGF-basic), Rat;

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.

Amino Acid Sequence:

00001 MPALPEDGGG AFPPGHFKDP KRLYCKNGGF FLRIHPDGRV
00041 DGVREKSDPH VKLQLQAEER GVVSIGVCA NRYLAMKEDG
00081 RLLASKCVTE ECFFERLES NNYNTYRSRK YSSWYVALKR
00121 TGQYKLGSKT GPGKAILFL PMSAKS

Source: *E. coli*

Species: Rat

Biological Activity: Fully biologically active when compared to standard. The ED_{50} as determined by a cell proliferation assay using murine balb/c 3T3 cells is less than 0.2 ng/ml, corresponding to a specific activity of $> 5.0 \times 10^6$ IU/mg.

Molecular Weight: Approximately 16.4 kDa, a single non-glycosylated polypeptide chain containing 146 amino acids.

Formulation: Lyophilized from a 0.2 μ m filtered solution in PBS, pH 7.4.

Appearance: Sterile Filtered White lyophilized (freeze-dried) powder.

Reconstitution: We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1 % BSA to a concentration of 0.1-1.0 mg/ml. Stock solutions should be apportioned into working aliquots and stored at ≤ -20 °C. Further dilutions should be made in appropriate buffered solutions.

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

Endotoxin Level: Less than 1 EU/ μ g of rRtbFGF as determined by LAL method.

Storage: This lyophilized preparation is stable at 2-8 °C, but should be kept at -20 °C for long term storage, preferably desiccated. Upon reconstitution, the preparation is stable for up to one week at 2-8 °C. For maximal stability, apportion the reconstituted preparation into working aliquots and store at -20 °C to -70 °C. Avoid repeated freeze/thaw cycles.