

DATASHEET Version 20181206

FGF-basic (145aa), Human

Cat. No.: Z03310-10

Size: 10.0 ug

Synonyms: Fibroblast Growth Factor-basic, FGF-2, HBGF-2. Prostatropin

Description:

Fibroblast Growth Factor-basic (FGF-basic), also known as FGF-2, is a pleiotropic cytokine and one of the prototypic members of the heparin-binding FGF family. Like other FGF family members, FGF-basic has the β trefoil structure. In vivo, FGF-basic is produced by a variety of cells, including cardiomycotes, fibroblasts, and vascular cells. FGF-basic regulates a variety of processes including cell proliferation, differentiation, survival, adhesion, motility, apoptosis, limb formation and wound healing. FGF-basic can be tumorigenic due to its role in angiogenesis and blood vessel remodeling. The angiogenic effects of FGF-basic can produce beneficial cardioprotection during acute heart injury.

Recombinant Human FGF-basic (145a.a.)produced in E.coli is a single non-glycosylated polypeptide chain containing 145 amino acids. A fully biologically active molecule, rhFGF-basic has a molecular mass of 16.4 kDa analyzed by reducing SDS-PAGE and is obtained by chromatographic techniques at GenScript.

Source: E. coli

Biological Activity: $ED_{50} < 0.25$ ng/mL, measured by the cell proliferation assay using 3T3 cells, corresponding to a specific activity of > 4 × 10⁶ units/mg

Molecular Weight: 16.4 kDa, observed by reducing SDS-PAGE.

Formulation: Lyophilized after extensive dialysis against PBS.

Reconstitution: Reconstituted in ddH2O or PBS at

100 µg/ml.

Purity: > 95% as analyzed by SDS-PAGE.

Endotoxin Level: < 0.2 EU/µg, determined by LAL method.

Storage: Lyophilized recombinant Human FGFbasic (145a.a.) remains stable up to 6 months at lower than -70°C from date of receipt. Upon reconstitution, Human FGF-basic (145a.a.) should be stable up to 1 week at 4°C or up to 3 months at -20°C.