

DATASHEET Version 20181206

FGF-acidic, Human

Cat. No.: Z02921-1 **Size**: 1.0 mg

Synonyms: HBGF-1, ECGF-beta, FIBP, FGFIBP, FIBP-1, ECGF, ECGFA, GLIO703, FGF1, FGF-a

Description:

Fibroblast Growth Factor- acidic (FGF-acidic), also known as FGF-1 and endothelial cell growth factor, is a member of the FGF family which currently contain 23 members. FGF acidic and basic, unlike the other members of the family, lack signal peptides and are apparently secreted by mechanisms other than the classical protein secretion pathway. FGF acidic has been detected in large amounts in the brain. Other cells known to express FGF acidic include hepatocytes, vascular smooth muscle cells, CNS neurons, skeletal muscle cells, fibroblasts, keratinocytes, endothelial cells, intestinal columnar epithelium cells and pituitary basophils and acidophils. As with other FGF's, FGF acidic exhibits considerable species cross reactivity. FGF acidic and FGF basic stimulate the proliferation of all cells of mesodermal origin, and many cells of neuroectodermal, ectodermal and endodermal origin.

Recombinant human Fibroblast Growth Factoracidic (rhFGF-acidic)produced in *E. coli* is a single non-glycosylated polypeptide chain containing 140 amino acids. A fully biologically active molecule, rhFGF-acidic has a molecular mass of 15.8 kDa analyzed by reducing SDS-PAGE and is obtained by proprietary chromatographic techniques at GenScript.

Amino Acid Sequence:

00001 FNLPPGNYKK PKLLYCSNGG HFLRILPDGT VDGTRDRSDQ 00041 HIQLQLSAES VGEVYIKSTE TGQYLAMDTD GLLYGSQTPN 00081 EECLFLERLE ENHYNTYISK KHAEKNWFVG LKKNGSCKRG 00121 PRTHYGQKAI LFLPLPVSSD

Source: E. coli Species: Human

Biological Activity: ED_{50} <0.3ng/ml, measured by a cell proliferation assay of 3T3 Cells, corresponding to a specific activity of >3.3 × 10⁶ IU/mg in the presence of 10 µg/ml of heparin.

Molecular Weight: 15.8 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% by SDS-PAGE and HPLC analyses. **Endotoxin Level**: <0.2 EU/μg, determined by LAL method.

Storage: Lyophilized recombinant human Fibroblast Growth Factor- acidic (rhFGF-acidic) remains stable up to 6 months at lower than -70°C from date of receipt. Upon reconstitution, rhFGF-acidic should be stable up to 2 weeks at 4°C or up to 3 months at -20°C.