

## Active Recombinant Mouse Fgf1 Protein (140 aa)

**Cat. No.** Fgf1-403F    **Lot. No.** (See product label)

### SPECIFICATION

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|-------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product Overview</b> | Recombinant mouse Fibroblast Growth Factor- acidic (rmFGF-acidic) produced in E. coli is a single non-glycosylated polypeptide chain containing 140 amino acids. A fully biologically active molecule, rmFGF-acidic has a molecular mass of 15.8 kDa analyzed by reducing SDS-PAGE and is obtained by proprietary chromatographic techniques.                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Species</b>          | Mouse                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Source</b>           | E.coli                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>ProteinLength</b>    | 140                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Description</b>      | <p>Fibroblast Growth Factor- acidic (FGF-acidic) is a mitogen targeting at the endothelial cells, and belongs to the heparin binding FGF family, which contains 22 members. FGF-acidic binds to the receptor family FGFR1-4 in vivo with the assistance of heparin. However, along with FGF -basic, FGF-acidic lacks the signal peptide segment, and thus is not secreted via endoplasmic reticulum (ER) and Golgi bodies. Studies have shown that FGF-acidic is highly regulated, and it is a direct angiogenesis factor. If unregulated, angiogenesis could contribute to several diseases including arthritis, diabetes, ocular neovascularization, and especially tumors. Therefore, FGF-acidic is treated as a potential oncogene, and its overexpression is correlated tightly with several cancers.</p> |
| <b>Form</b>             | Sterile Filtered White lyophilized (freeze-dried) powder.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |

 Tel: 1-631-559-9269    1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)     Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

|                       |                                                                                                                                                                                                                                                                           |
|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Bio-activity</b>   | ED50 < 0.4 ng/mL, measured by a cell proliferation assay using 3T3 cells in the presence of 10 µg/mL heparin, corresponding to a specific activity of > 2.5 × 10 <sup>6</sup> units/mg.                                                                                   |
| <b>Molecular Mass</b> | 15.8 kDa, observed by reducing SDS-PAGE.                                                                                                                                                                                                                                  |
| <b>AA Sequence</b>    | FNLPLGNYKKPKLLYCSNGGHFLRILPDGTVDGTRDRSDQHIQLQLSAESAGEVYIK<br>GTETGQYLAMDTEGLLYGSQTPNEECLFLERLEENHYNTYTSKKHAEKNWVGLKK<br>NGSCKRGPRTHYGQKAILFLPLPVSSD                                                                                                                       |
| <b>Endotoxin</b>      | < 0.2 EU/µg, determined by LAL method.                                                                                                                                                                                                                                    |
| <b>Purity</b>         | > 95% by SDS-PAGE and HPLC analyses.                                                                                                                                                                                                                                      |
| <b>Storage</b>        | Lyophilized recombinant mouse Fibroblast Growth Factor- acidic (rmFGF-acidic) remains stable up to 6 months at -80 centigrade from date of receipt. Upon reconstitution, rmFGF-acidic should be stable up to 2 weeks at 4 centigrade or up to 3 months at -20 centigrade. |
| <b>Storage Buffer</b> | Lyophilized after extensive dialysis against PBS.                                                                                                                                                                                                                         |
| <b>Reconstitution</b> | Reconstituted in ddH <sub>2</sub> O at 100 µg/mL.                                                                                                                                                                                                                         |

## GENE INFORMATION

|                        |                                                                                                                                                          |
|------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Gene Name</b>       | <a href="#">Fgf1 fibroblast growth factor 1 [ Mus musculus (house mouse) ]</a>                                                                           |
| <b>Official Symbol</b> | <a href="#">Fgf1</a>                                                                                                                                     |
| <b>Synonyms</b>        | FGF1; fibroblast growth factor 1; AFGF; ECGF; FGFA; ECGFA; ECGFB; FGF-1; HBGF1; HBGF-1; GLIO703; ECGF-beta; FGF-alpha; fibroblast growth factor 1; beta- |

 Tel: 1-631-559-9269 1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

endothelial cell growth factor; endothelial cell growth factor, alpha; endothelial cell growth factor, beta; fibroblast growth factor 1 (acidic); heparin-binding growth factor 1

|                |                                                                                                    |
|----------------|----------------------------------------------------------------------------------------------------|
| Gene ID        | 14164                                                                                              |
| mRNA Refseq    | <a href="http://www.ncbi.nlm.nih.gov/nuccore/NM_010197">www.ncbi.nlm.nih.gov/nuccore/NM_010197</a> |
| Protein Refseq | <a href="http://www.ncbi.nlm.nih.gov/protein/NP_034327">www.ncbi.nlm.nih.gov/protein/NP_034327</a> |
| UniProt ID     | P10935                                                                                             |

 Tel: 1-631-559-9269 1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA