

## Product datasheet for **TP720034L**

### **Fgf1 (NM\_010197) Mouse Recombinant Protein**

#### **Product data:**

<b>Product Type:</b>	Recombinant Proteins
<b>Description:</b>	Recombinant protein of mouse fibroblast growth factor acidic
<b>Species:</b>	Mouse
<b>Expression Host:</b>	E. coli
<b>Expression cDNA Clone or AA Sequence:</b>	Phe16-Asp155
<b>Tag:</b>	Tag Free
<b>Predicted MW:</b>	15.8 kDa
<b>Concentration:</b>	lot specific
<b>Purity:</b>	>95% as determined by SDS-PAGE and Coomassie blue staining
<b>Buffer:</b>	Provided lyophilized from a 0.2 µm filtered solution of 20 mM Tris-HCl, 150 mM NaCl
<b>Bioactivity:</b>	ED50 is less than 0.5 ng/ml as determined by the dose-dependent stimulation of thymidine uptake by 3T3 cells in the presence of Heparin. Specific Activity of 2.0 x 10 <sup>6</sup> IU/mg.
<b>Endotoxin:</b>	< 0.1 EU per µg protein as determined by LAL test
<b>Reconstitution Method:</b>	Always centrifuge tubes before opening. Do not mix by vortex or pipetting. Dissolve the lyophilized protein in ddH <sub>2</sub> O. It is not recommended to reconstitute a concentration less than 100 µg/ml. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.
<b>Storage:</b>	Store at -80°C.
<b>Stability:</b>	Stable for at least 6 months from date of receipt under proper storage and handling conditions.
<b>RefSeq:</b>	<a href="#">NP_034327</a>
<b>Locus ID:</b>	14164
<b>UniProt ID:</b>	<a href="#">P61148</a> , <a href="#">Q6ZWS1</a>
<b>RefSeq Size:</b>	3909
<b>Cytogenetics:</b>	18 20.74 cM
<b>RefSeq ORF:</b>	468
<b>Synonyms:</b>	Dffrx; Fam; Fgf-1; Fgfa



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**Summary:**

Plays an important role in the regulation of cell survival, cell division, angiogenesis, cell differentiation and cell migration. Functions as potent mitogen in vitro. Acts as a ligand for FGFR1 and integrins. Binds to FGFR1 in the presence of heparin leading to FGFR1 dimerization and activation via sequential autophosphorylation on tyrosine residues which act as docking sites for interacting proteins, leading to the activation of several signaling cascades. Binds to integrin ITGAV:ITGB3. Its binding to integrin, subsequent ternary complex formation with integrin and FGFR1, and the recruitment of PTPN11 to the complex are essential for FGF1 signaling. Induces the phosphorylation and activation of FGFR1, FRS2, MAPK3/ERK1, MAPK1/ERK2 and AKT1. Can induce angiogenesis.[UniProtKB/Swiss-Prot Function]

**Product images:**