



# Recombinant Rat FGF acidic

20180711BB



**FOR RESEARCH ONLY! NOT FOR HUMAN USE!**

<b>Cat.-no.:</b>	<b>R20-018S</b>
Size:	10 µg
Lot. No.:	According to product label

## Scientific Background

<b>Gene-ID (NCBI):</b>	25317
<b>Synonyms:</b>	Fgf1; FGF-1; HBGF1; HBGF-1

FGF-acidic is one of 23 known members of the FGF family. Proteins of this family play a central role during prenatal development, postnatal growth and regeneration of a variety of tissues, by promoting cellular proliferation and differentiation. FGF-acidic is a non-glycosylated heparin binding growth factor that is expressed in the brain, kidney, retina, smooth muscle cells, bone matrix, osteoblasts, astrocytes and endothelial cells. FGF-acidic has the ability to signal through all the FGF receptors. Recombinant rat FGF-acidic is a 15.9 kDa protein consisting of 141 amino acid residues.

### Sequence

MFNLPLGNYK KPKLLYCSNG GHFLRILPDG TVDGTDRSD  
QHIQLQLSAE SAGEVYIKGT ETGQYLAMDT EGLLYGSQTP  
NEECLFLERL EENHYNTYTS KKHAENWVWV GLKKNKGSCKR  
GPRTHYGQKA ILFLPLPVSS D

### Database References

<b>Protein RefSeq:</b>	NP_036978.1
<b>Uniprot ID:</b>	P61149
<b>mRNA RefSeq:</b>	NM_012846.1

## Product Specifications

<b>Expressed in</b>	E. coli
<b>Purity</b>	> 95% by SDS-PAGE & HPLC analyses
<b>Endotoxin level</b>	< 0.1 ng /µg of protein (<1EU/µg).
<b>Formulation</b>	lyophilized
<b>Length (aa):</b>	141
<b>MW:</b>	15.9 kDa

**Stability:** The lyophilized protein is stable at room temperature for 1 month and at 4°C for 6 months. Reconstituted working aliquots are stable for 1 week at 2°C to 8°C and for 3 months at -20°C to -80°C.

**Reconstitution:** Reconstitute in 5 mM Sodium Phosphate, pH 7.2 to a concentration of ≤ 0.5 mg/mL. *Do not vortex.* This solution can be stored at 2-8°C for up to 1 week. For extended storage, it is recommended to further dilute in a buffer containing a carrier protein (example 0.1% BSA) and store in working aliquots at -20°C to -80°C.



**AVOID REPEATED FREEZE AND THAW CYCLES!**

**Biological Activity:** Determined by a cell proliferation assay using balb/c 3T3 cells. The expected ED<sub>50</sub> is ≤ 0.1 ng/ml, in the presence of 10 µg/ml heparin, corresponding to a specific activity of ≥ 1 x 10<sup>7</sup> units/mg.