Recombinant Mouse FGF acidic

20200525BB

FOR RESEARCH ONLY! NOT FOR HUMAN USE!

Cat.-no.:	**M10-045S**
Size:	10 µg
Lot. No.:	According to product label

Scientific Background

Gene-ID (NCBI):	*14164*
Synonyms:	HBGF-1; aFGF; acidic fibroblast growth factor; fibroblast growth factor 1 (acidic); heparin-binding growth factor 1

FGF-acidic is one of 23 known members of the FGF family. Proteins of this family play a central role during prenatal development and 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 mouse FGF-acidic is a 15.9 kDa protein consisting of 141 amino acid residues.

Sequence

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MFNLPLGNYK KPKLLYCSNG GHFLRILPDG TVDGTRDRSD
QHIQLQLSAE SAGEVYIKGT ETGQYLAMDT EGLLYGSQTP
NEECLFLERL EENHYNTYTS KKHAEKNWFV GLKKNGSCKR
GPRTHYGQKA ILFLPLPVSS D
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Database References

Protein RefSeq:	NP_034327.1
Uniprot ID:	P61148
mRNA RefSeq:	NM_010197.3

Product Specifications

Expressed in	E. coli
Purity	> 98% by SDS-PAGE & HPLC analyses
Endotoxin level	< 0.1 ng /µg of protein (<1EU/µg).
Formulation	Lyophilized from 5mM Sodium Phosphate, pH 7.2 + 100mM NaCl
Length (aa):	141
MW:	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: Centrifuge the vial prior to opening. Reconstitute in 5mM Sodium Phosphate, pH 7.0-7.2 to a concentration of 0.5-1.0 mg/ml. 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: The ED_{50} as determined by a cell proliferation assay using Balb/c 3T3 cells is ≤ 0.5 ng/ml in the presence of 10 µg/ml heparin, corresponding to a specific activity of ≥ 2x 10^6 units/mg.