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# Human FGF-acidic/FGF1 Recombinant Protein

10 µg

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**For Research Use Only. Not for Use in Diagnostic Procedures.****MW (kDa):**  
16.0**UniProt ID:**  
#P05230**Entrez-Gene Id:**  
2246

## Background

FGF-acidic (FGF1) is a potent growth factor for fibroblasts and endothelial cells (1). FGF-acidic is involved in wound repair, angiogenesis, and development (1). FGF-acidic is secreted from cells via an endoplasmic reticulum/Golgi independent mechanism (1,2). The ability of FGF-acidic to bind to heparin sulfate is required for its ability to interact with FGF receptors and induce signaling (1-4). There are four distinct FGF receptors and each has multiple splice variants (1,3). FGF-acidic binds with high affinity to many, but not all, FGFRs (1). Signaling cascades activated through FGF-basic binding to FGFR include the ras-raf-MAPK, PLC $\gamma$ /PKC, and PI3K/Akt pathways (1).

## Endotoxin

Endotoxin levels are less than or equal to 1 EU / 1 µg hFGF-acidic.

## Purity

A greater than or equal to 95% purity was determined by SDS-PAGE.

## Source / Purification

Recombinant human FGF-acidic was expressed in *E. coli* and is supplied in a lyophilized form.

## Bioactivity

The bioactivity of recombinant human FGF-acidic was determined in a NR6R-3T3 cell proliferation assay. The ED<sub>50</sub> of each lot is less than or equal to 2 ng/mL.

## Background References

1. Powers, C.J. et al. (2000) *Endocr Relat Cancer* 7, 165-97.
2. Prudovsky, I. et al. (2003) *J Cell Sci* 116, 4871-81.
3. Ornitz, D.M. and Itoh, N. (2001) *Genome Biol* 2, REVIEWS3005.
4. Mohammadi, M. et al. (2005) *Curr Opin Struct Biol* 15, 506-16.

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