Revision 7

#61977 Store at -20C

Human FGF-basic/FGF2 (154 aa) Recombinant Protein

10 µg

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MW (kDa):	UniProt ID:	Entrez-Gene Id:
17	#P09038	2247

Background

FGF basic (FGF2) is produced by epithelial, tumor and other cell types (1). FGF basic is involved in developmental processes and regulates differentiation, proliferation, and migration (1-6). FGF basic is a critical factor for growing embryonic stem cells in culture without inducing differentiation. FGF basic has a high affinity for heparan sulfate (1,2) and FGF-heparan sulfate binding is a step in the activation of FGFR tyrosine kinase. There are four distinct FGF receptors and each has multiple splice variants. FGF basic binds with high affinity to many, but not all, FGFRs. Signaling cascades activated through FGF basic binding to FGFR include the ras-raf-MAPK, PLCγ/PKC, and PI3K/AKT pathways (1).

Endotoxin

Less than or equal to 1 EU / 1 µg hFGF-basic

Purity

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

Source / Purification

Human FGF-basic Recombinant Protein was expressed in *E. coli* and is supplied in a lyophilized form.

Bioactivity

The bioactivity of Human FGF-basic Recombinant Protein was determined in a NIH/3T3 cell proliferation assay. The ED_{50} of each lot is between 0.05 - 1.0 ng/ml.

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Background References

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2. Ornitz, D.M. and Itoh, N. (2001) *Genome Biol* 2, REVIEWS3005.
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4. Fontijn, D. et al. (2006) *Br J Cancer* 94, 1627-36.
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6. Acevedo, V.D. et al. (2009) *Cell Cycle* 8, 580-8.

Cross-Reactivity Key

H: human **M:** mouse **R:** rat **Hm:** hamster **Mk:** monkey **Vir:** virus **Mi:** mink **C:** chicken **Dm:** D. melanogaster **X:** Xenopus **Z:** zebrafish **B:** bovine **Dg:** dog **Pg:** pig **Sc:** S. cerevisiae **Ce:** C. elegans **Hr:** horse **GP:** Guinea Pig **Rab:** rabbit **All:** all species expected

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