

Recombinant Human FGFbasic (Fibroblast Growth Factor basic)

Product Description

FGFbasic 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. FGFbasic is a non-glycosylated, heparin-binding growth factor that is expressed in the brain, pituitary, kidney, retina, bone, testis, adrenal gland, liver, monocytes, epithelial cells and endothelial cells. FGFbasic signals through FGFR 1b, 1c, 2c, 3c and 4. Recombinant Human FGFbasic is a 17.2 kDa protein consisting of 154 amino acid residues.

Typical Specifications

Species	Human
Expression	E. coli Cell Expressed
Activity	<u>Assay 1</u> : Typically ≤ 0.5 ng/mL ED ₅₀ <u>Assay 2</u> : Typically ≤ 0.1 ng/mL ED ₅₀
Purity	$\geq 95\%$
Endotoxin	< 1.0 EU/ μ g
Molecular Mass	17.2 kDa
Formulation	5 mM Tris, pH 7.6 + 150 mM NaCl
Country of Origin	USA

Purity Confirmation

This was determined by SDS-PAGE gel and HPLC analysis.

Activity Assay

Assay#1: Determined by the dose-dependent stimulation of thymidine uptake by BaF3 cells expressing FGF receptors.

Assay#2: Determined by a cell proliferation assay using balb/c 3T3 cells.

AA Sequence

AAGSITTLPA	LPEDGGSGAF	PPGHFKDKPKR
LYCKNGGFFL	RIHPDGRVDG	VREKSDPHIK
LQLQAEERGV	VSIKGVCANR	YLAMKEDGRL
LASKCVTDEC	FFFERLESNN	YNTYRSRKYT
SWYVALKRTG	QYKLGSKTGP	GQKAILFLPM
SAKS		

Reconstitution Buffer

Centrifuge the vial prior to opening. Reconstitute in 5mM Tris, pH 7.6, to a concentration of 0.1-1.0 mg/ml. Do not vortex.

Storage

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-thaw cycles.

Limited Use and Restrictions

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