FGF-1/FGFa/FGF-acidic (Phe16-Asp155), Human, Recombinant

Cat. No. : PCK004

General Information

Synonyms	Fibroblast Growth Factor 1;FGF-1;Acidic Fibroblast Growth Factor;aFGF;Endothelial Cell Growth Factor;ECGFHeparin-Binding Growth Factor 1;HBGF-1;FGF1;FGFA
Species	Human
Expression host	E.coli
Sequence	Phe16-Asp155
Accession	P05230
Mol mass	16 kDa
Expiration date	12 months
Bio activity	Measured in a cell proliferation assay using BALB/c 3T3 cells. The ED50 for this effect is 0.2-2 ng/mL.

Product feature

Purity	> 95% as determined by reducing SDS-PAGE.
Endotoxin (EU/μg)	< 0.1
Storage	Lyophilized protein should be stored at -5~-20°C, stable for one year after receipt. Reconstituted protein solution can be stored at 2-8°C for 2-7 days. Aliquots of reconstituted samples are stable at -5~-20°C for 3 months.
Shipping	Ice bag
Formulation	Lyophilized from a 0.2 μm filtered solution of 50 mM MOPS, 100 mM Na2SO4, 1 mM EDTA, pH 7.9.
Reconstitution	Always centrifuge tubes before opening. Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100 μg/mL. Dissolve the lyophilized protein in sterile water. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

Background

FGF acidic, also known as ECGF, FGF-1and HBGF-1, 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. It is a mitogenic peptide that is produced by multiple cell types and stimulates the proliferation of cells of mesodermal, ectodermal, and endodermal origin. Its association with heparan sulfate is a prerequisite for activation of FGF Receptors. Internalized FGF acidic migrates to the nucleus where it is phosphorylated by nuclear PKC delta, exported to the cytosol, dephosphorylated, and degraded. Intracellular FGF acidic inhibits p53 activity and proapoptotic signaling.