

Recombinant Protein Technical Manual Recombinant Human FGF/FGFa Protein (Active)

RPES3802

				-			
 1.4	(m)	r ni l	( mh		հ	inden 1	
			 		[ • ]	ta	

Product SKU: RPES3802	Size: 10µg
Species: Human	Expression host: E. coli
Uniprot: P05230	

Protein Information:						
Molecular Mass:	15.9 kDa					
AP Molecular Mass:	16 kDa					
Tag:						
Bio-activity:	Measured in a cell proliferation assay using BALB/c 3T3 cells. The ED50 for this effect is 0.2-2 ng/ml.					
Purity:	> 95 % as determined by reducing SDS-PAGE.					
Endotoxin:	< 1.0 EU per $\mu g$ as determined by the LAL method.					
Storage:	Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.					
Shipping:	This product is provided as lyophilized powder which is shipped with ice packs.					
Formulation:	Lyophilized from a 0.2 $\mu m$ filtered solution of 20mM Tris, 400mM NaCl, 1mM DTT, pH 8.0 .					
Reconstitution:	Please refer to the printed manual for detailed information.					
Application:	Cell Culture					
Synonyms:	Fibroblast Growth Factor 1; FGF; Acidic Fibroblast Growth Factor; aFGF; Endothelial Cell Growth Factor; ECGFHeparin-Binding Growth Factor 1; HBGF; FGF1; FGFA					

## Sequence: Phe16-Asp155

## Background:

FGF acidic, also known as ECGF, FGFand HBGF, 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.