

Product Information

Catalog Number	KD-017
Species	Human
Protein Construction	FGF-2 (Ala135-Ser288), Accession # P09038-4
Tag	No tag
Expression System	<i>E. coli</i>
Purity	> 95% as determined by SDS-PAGE
Predicted Molecular Mass	17 kDa
SDS-PAGE	17 kDa, under reducing conditions
Endotoxin	<0.1 EU/μg of the protein by the LAL method
Biological Activity	Measured in a cell proliferation assay using NIH-3T3 mouse embryonic fibroblasts. The ED50 for this effect is 0.1-1 ng/mL.
Formulation	Lyophilized from a 0.22μm filtered solution in PBS
Reconstitution	It is recommended that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute the lyophilized powder at 100 μg/mL in sterile deionized water
Storage & Stability	Use a manual defrost freezer and avoid repeated freeze-thaw cycles 12 months from date of receipt, at lower than -70 °C as supplied 1 week, 2 to 8 °C under sterile conditions after reconstitution 1 month, -20 to -70 °C under sterile conditions after reconstitution
Usage	Research use only

Product Data

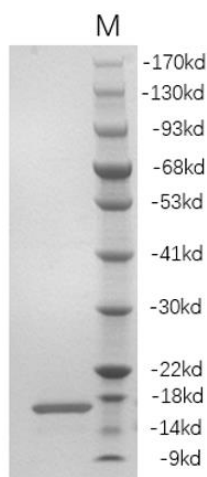


Figure 1. SDS-PAGE analysis with 2 μ g recombinant human FGF-2 per lane, under reducing conditions, showing bands at 17 kDa

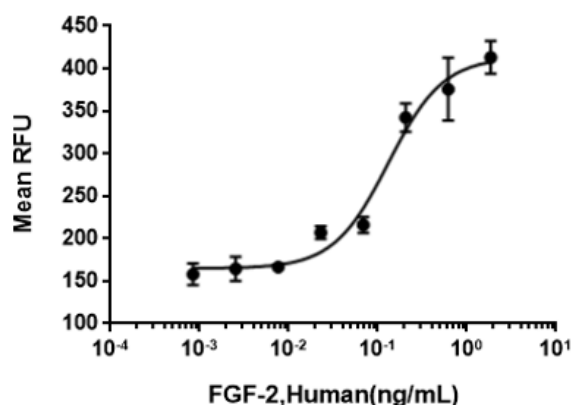


Figure 2. Biological activity measured in a cell proliferation assay using NIH-3T3 cells, ED50 for this effect is 0.1-1 ng/mL

Background

FGF-2 (fibroblast growth factor-2), also commonly known as bFGF (basic Fibroblast Growth Factor), is a member of the FGF family. It binds FGFRs and heparan sulfate and modulate the function of a wide range of cell types. Once the FGF-2/FGFR/HSPG complex is formed, it triggers a cascade of signals inside the cell (primarily the MAPK/ERK and PI3K/AKT pathways), which ultimately lead to changes in gene expression and the cellular responses. FGF-2 is a pleiotropic molecule, meaning it has multiple, diverse effects depending on the context and type of cell it acts upon. Its main functions include: cell proliferation, angiogenesis, cell survival (anti-apoptosis), tissue repair and wound healing, embryonic Development and nervous system function.