Growth Factors

Human Recombinant FGF-2

Basic Fibroblast Growth Factor

50 µg
1000 µg

customers@corebiogenesis.com

More info and related products at
www.corebiogenesis.com

Product Description

FGF-2, also known as basicFGF, is a growth factor that is produced mainly in fibroblasts, endothelial cells and smooth muscle cells. FGF-2 controls fundamental biological processes, including cell growth and differentiation, tissue formation, angiogenesis and wound healing. It is also an essential component in human pluripotent stem cells culture, as one of the main media components for maintaining pluripotency. **Recombinant human FGF-2 consists of 146 amino acids,16.06 kDa.** FGF-2 is qualified for different cell stem cell culture applications, including industrial cell-manufacturing technologies.

Product Information

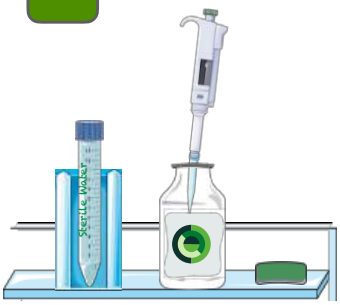
Alternative Names:	bFGF-2, FGF-β, FGF2, Fibroblast growth factor-basic, HBGF-2.
Accession Number:	P09038
Amino Acid Sequence:	PALPEDGGSGAF PPGHFKDPKRLYCKNGGFFLRIHPDGRVDGVREKSDPHIKL QLQAEERGVVSIKGVCANRYLAMKEDGRLLASKCVTDECFFFERLESNNYNTY RSRKYTSWYVALKRTGQYKLGSKTGPGQKAILFLPMSAKS
Molecular mass:	Estimated 16.4kDA.
Origin:	Plant-derived.
Species:	Human.
Similarity:	Bovine (99%), Porcine (99%), Mouse (94%).

Product Specifications

Purity:	≥ 95% SDS page resolved under reduced (R) conditions.
Bioactivity:	The specific bioactivity corresponds to generally EC5O ≤ 1 ng/ml. Determined by the ability to promote the proliferation of NIH/3T3 cells cultured in adherent condition.
Formulation:	Solution in PBS or Lyophilized.
Endotoxin level:	Recombinant protein expressed in plant system, free of bacterial endotoxins.
Animal Component:	Animal-derived Component Free. Core Biogenesis strictly guarantees that our recombinant proteins are not produced with or contain any components of animal origin.

Product Use & Storage

1



Add Dilution Buffer
Recommended to further reconstitute in sterile water for injection or PBS to at least 0.1mg/mL to allow for maximum protein recovery

2

Wait
Allow your protein to fully dissolve and get reconstituted for 5 to 10´ at room temperature.

3

Mix
Gently resuspend by pipetting up and down 10 times the content from the vial to the syringe. Avoid foaming and do not vortex.

4

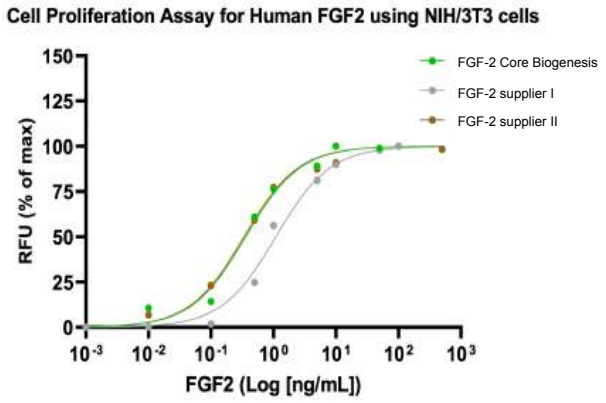
Aliquot
Prepare single use aliquots in tubes. Be sure to label your aliquots with the growth factor type, lot and date.

Protein is stable as supplied at -20 ° C to -80°C

Reconstituted protein can be conserved frozen at -20° or -80°C. *See batch documentation for specific expiration date.

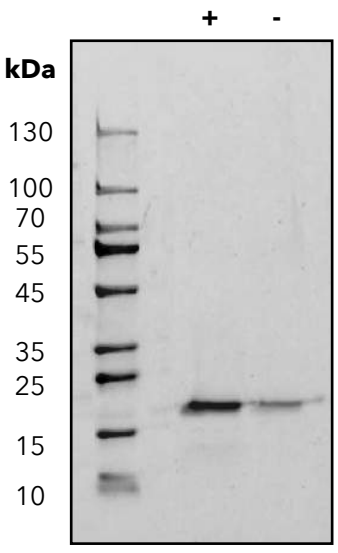
Product Data

Bioactivity



The biological activity of Core Biogenesis Human Recombinant FGF-2 was tested by its ability to promote the proliferation of NIH/3T3 fibroblasts. Cell proliferation is measured using non-radioactive colorimetric assay and monitored by absorbance. The EC50 is defined as the effective concentration of the growth factor at which cell proliferation is at 50% of maximum. The EC50 is generally ≤0.5 ng/mL. For this particular case, Core Biogenesis hFGF-2 corresponds to EC50=0.36 ng/mL.

SDS-PAGE



1 µg/lane of Core Biogenesis Pure Human Recombinant FGF-2 was resolved in SDS-PAGE under reduced (R) conditions.
Showing a predicted molecular mass of 16.4 kDa.