

BACKGROUND:

Fibroblast growth factor 8 (FGF8) is a critical mitogenic factor that is required for normal development of the eye, ear, brain, and limb. FGF8 broadly functions to promote cell proliferation, differentiation, and migration. Overexpression of FGF8 increases tumor growth and angiogenesis. Human and mouse FGF8 proteins show 100% homology.

Recombinant human Fibroblast growth factor 8 is a non-glycosylated protein monomer, containing 194 amino acids and having a molecular mass of 22.5 kDa.

Cat. No.:
RP1176AF

Alternate Names:
Androgen-induced growth factor, AIGF, Heparin-binding growth factor 8, HBGF-8

AA Sequence:
MQVTVQSSPN FTQHVREQSL VTDQLSRRLI RTYQLY
SRTS GKHVQVLANK RINAMAEDGD PFAKLIVETD TF
GSRVVRGAETGLYICMN KKGKLIAXSN GKGKDCVF
TE IVLENNYTAL QNAKYEGWYM AFTRKGRPRK GSKT
RQHQRV VHFMRKLRPG HHTTEQSLRFEFLNPPFTR S
LRGSQRTWA PEPR

TECHNICAL INFO

Source:
E. coli

Physical Appearance:
Sterile Filtered white lyophilized (freeze-dried) powder.

Formulation:
5 mM sodium phosphate, 50mM sodium chloride, pH 7.5

Stability:
Lyophilized product is very stable at -20°C. Reconstituted material should be aliquoted and frozen at -20°C. It is recommended that a carrier protein (0.1% HSA or BSA) is added for long term storage.

Reconstitution:
Centrifuge vial before opening. When reconstituting the product, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution. It is recommended to reconstitute the lyophilized product with sterile water at 0.1 mg/mL, which can be further diluted into other aqueous solutions.

Protein Content and Purity determined by:

- UV spectroscopy at 280 nm.
- RP-HPLC calibrated against a known standard.
- Quantitation against a known standard via reducing and non-reducing SDS-PAGE gels.

Endotoxin Level:
Endotoxin level, as measured by LAL analysis, is <0.01ng/ug or <0.1EU/ug.

Biological Activity:
The activity is measured by dose-dependent BALB/c 3T3 cell proliferation, with Bioactivity Acceptance Criteria ED50 at 150 ng/mL.

Animal Component-Free
The activity is measured by dose-dependent BALB/c 3T3 cell proliferation, with Bioactivity Acceptance Criteria ED50 at 150 ng/mL.

