

BACKGROUND:

Fibroblast growth factor 5 (FGF-5) is a secreted heparin-binding growth factor that binds to FGF receptors 1 and 2 (FGFR1 and FGFR2). FGF-5 is expressed in the mesenchyme, skeletal muscles, central nervous system, and hair follicles to promote cell differentiation and proliferation. FGF-5 functions as a regulatory factor during hair elongation and skeletal muscle development.

Recombinant human Fibroblast growth factor 5 is a non-glycosylated protein monomer, containing 252 amino acids and having a molecular mass of 27.7 kDa.

Cat. No.:
RP1200

Alternate Names:
Heparin-binding growth factor 5, HBGF-5, Smag-82

AA Sequence:

| | | |
|------------|------------|------------|
| MAWAHGEKRL | APKGQPGPAA | TDRNPIGSSS |
| RQSSSSAMSS | SSASSSPAAS | LGSQGSGLAQ |
| SSFQWSPSGR | RTGSLYCRVG | IGFHLQIYPD |
| GKVNGSHEAN | MLSVLEIFAV | SQGIVGIRGV |
| FSNKFLAMSK | KGKLHASAKF | TDDCKFRERF |
| QENSYNTYAS | AIHRTEKTGR | EWYVALNKRK |
| KAKRGCSPRV | KPQHISTHFL | PRFKQSEQPE |
| LSFTVTVPEK | KNPPSPIKSK | IPLSAPRKNT |
| NSVKYRLKFR | FG | |

TECHNICAL INFO

Source:
E. coli

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

Formulation:
10 mM sodium phosphate and 100 mM 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 the dose-dependent NR6R-3T3 Proliferation w 1 ug heparin, with Bioactivity Acceptance Criteria ED50 at 10 ng/mL.

