

BACKGROUND

Fibroblast Growth Factors, FGFs, are a 22 member family of proteins known to be involved in angiogenesis, wound healing and embryonic development. As a family, they bind to heparin and signal through four receptor tyrosine kinases called, FGFR1, 2, 3 and 4. Human FGF-22 is a member of the FGF-7 subfamily and is synthesized by multiple cell lines including neurons, keratinocytes and skeletal muscle myotubes. Human FGF-22 shares 86% homology with mouse FGF-22.

Recombinant human FGF-22 is a non-glycosylated protein, consisting of 149 amino acids and having a molecular weight of 17.3 kDa.

Alternative Names:

FGFM

Amino Acid Sequence:

MTPSASRGPR SYPHLEGDVR WRRLEFSSTHF FLRVDPGGRV
QGTRWRHGQD SILEIRSVHV GVVVIKAVSS GFYVAMNRRG
RLYGSRLYTV DCRFRERIEE NGHNTYASQR WRRRGQPMFL
ALDRRGPRP GGRTRRYHLS AHFLPVLVS

TECHNICAL INFORMATION

Source: *E.coli*

Physical Appearance:

Sterile Filtered white lyophilized (freeze-dried) powder.

Formulation:

Recombinant human FGF-22 is lyophilized with no additives.

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 a concentration of 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:

Activity, as determined by the dose-dependent proliferation of 4MBr-5 cells, is typically 50-300 ng/mL.

Products are for research use only. They are not intended for human, animal, or diagnostic applications.

