

Background:

FGF acidic, also known as FGF1, ECGF, and HBGF-1, is a 17 kDa nonglycosylated member of the FGF family of mitogenic peptides. FGF acidic, which is produced by multiple cell types, stimulates the proliferation of all cells of mesodermal origin and many cells of neuroectodermal, ectodermal, and endodermal origin. It plays a number of roles in development, regeneration, and angiogenesis. Human FGF acidic shares 54% amino acid sequence identity with FGF basic and 17%-33% with other human FGFs. It shares 92%, 96%, 96%, and 96% aa sequence identity with bovine, mouse, porcine, and rat FGF acidic, respectively, and exhibits considerable species crossreactivity. Alternate splicing generates a truncated isoform of human FGF acidic that consists of the N-terminal 40% of the molecule and functions as a receptor antagonist.

Source:

Recombinant Human FGF-1 is expressed from Escherichia coli. It contains AA Phe 16 - Asp 155. The protein has a calculated MW of 18.6 kDa. This protein carries a polyhistidine tag at the N-terminus.

His₆ TEV FGF-1(Phe 16 - Asp 155)

Endotoxin:

Less than 1.0 EU per µg by the LAL method.

AA Sequence:

FNLPNGNYKKPKLLYCSNNGGHFLRILPDGTVDGTRDRSDQHIQLQLSAESVGEVYIKSTETGQYLAMDTDGLLYGSQTPNEECLFLERLE
ENHYNTYISKKHAEKNWFVGLKKNKNGSCKRGPRTHYGQKAILFLPLPVSSD

Purity:

Purity >95% as determined by SDS-PAGE.

Formulation:

Lyophilized from 0.22 µm filtered solution in PBS, pH7.4. Normally trehalose is added as protectant before lyophilization.

Reconstitution

Reconstitute in sterile distilled water or aqueous buffer containing 0.1% BSA to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at < -20°C. Further dilutions should be made in appropriate buffered solutions.

Storage

For long term storage, the product should be stored at lyophilized state at -20°C or lower.

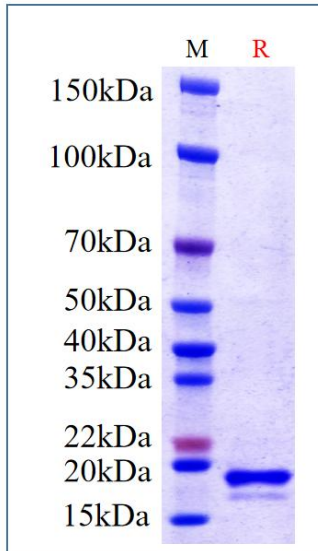
Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

-20°C to -70°C for 12 months in lyophilized state;

-70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



Human FGF-1, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.