

FGF-10, Human

Cat. No.: Z03314-1

Size: 1.0 mg

Synonyms: Fibroblast Growth Factor-10, FGFA, Keratinocyte growth factor-2

Description:

Fibroblast Growth Factor-10 (FGF-10) is a mitogen mainly produced by mesenchymal stem cells in the lung. FGF-10 belongs to the heparin binding FGF family, and is also known as Keratinocyte Growth Factor-2 (KGF-2). It shares homology with KGF and receptor binding to FGFR2-IIIb. However, while KGF induces proliferation and differentiation of various epithelial cells, FGF-10 promotes budding and branching morphogenesis during the multi-organ development via mesenchymal-epithelial cell interactions. FGF-10 is critical for lung and limb development, and is regulated by Shh during early development. Recombinant Human FGF-10 produced in *E. coli* is a single, non-glycosylated polypeptide chain containing 169 amino acids. A fully biologically active molecule, rhFGF-10 has a molecular mass of 19.3 kDa analyzed by reducing SDS-PAGE and is obtained by chromatographic techniques at GenScript.

Source: *E. coli*

Biological Activity: ED₅₀ < 20 ng/mL, measured by a cell proliferation assay using 4 MBr-5 cells, corresponding to a specific activity of > 5.0 × 10⁴ units/mg.

Molecular Weight: 19.3 kDa, observed by reducing SDS-PAGE.

Formulation: Lyophilized after extensive dialysis against PBS.

Reconstitution: Reconstituted in ddH₂O at 100 µg/ml.

Purity: > 95% as analyzed by SDS-PAGE.

Endotoxin Level: < 0.2 EU/µg, determined by LAL method.

Storage: Lyophilized recombinant Human FGF-10 remains stable up to 6 months at lower than -70°C from date of receipt. Upon reconstitution, Human FGF-10 should be stable up to 1 week at 4°C or up to 3 months at -20°C.