

FGF-10, Mouse

Cat. No.: Z03155-10

Size: 10.0 ug

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 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 both KGF and FGF-10 activate the receptor FGFR2-IIIb. However, unlike KGF, which induces the proliferation and differentiation of various epithelial cells, FGF-10 is an essential factor for the budding and branching morphogenesis during multi-organ development via mesenchymal-epithelial interactions. FGF-10 is crucial for lung and limb development and is regulated by Shh during early development.

Recombinant mouse Fibroblast Growth Factor-10 (rmFGF-10) produced in *E. coli* is a single non-glycosylated polypeptide chain containing 148 amino acids. A fully biologically active molecule, rmFGF-10 has a molecular mass of 17.0 kDa analyzed by reducing SDS-PAGE and is obtained by proprietary chromatographic techniques at GenScript.

Amino Acid Sequence:

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00001 SSAGRHVRSY NHLQGDVWR RLFSTKYFL TIEKNGKVSG
00041 TKNEDCPYSV LEITSVEIGV VAVKAINSNY YLAMNKKGKL
00081 YGSKEFNDC KLKERIEENG YNTYASFNWQ HNGRQMYVAL
00121 NGKGAPRRGQ KTRRKNTSAH FLPMTIQT
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Source: *E. coli*

Species: Mouse

Biological Activity: ED₅₀ < 10 ng/mL, measured by a cell proliferation assay using 4MBr-5 cells, corresponding to a specific activity of > 1.0 × 10⁵ units/mg.

Molecular Weight: 17.0 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 and HPLC.

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

Storage: Lyophilized recombinant mouse Fibroblast Growth Factor-10 (rmFGF-10) remains stable up to 6 months at lower than -70°C from date of receipt. Upon reconstitution, rmFGF-10 remains stable up to 2 weeks at 4°C or up to 3 months at -20°C.