

PRODUCT DATA SHEET



Bioworld Technology, Inc.

Recombinant FGF-10, His, Human

Catalog Number: BK0032-1mg

Source: Escherichia coli.

Quantity: 1mg

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 the homolog and receptor FGFR2-IIIb with KGF. 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 the multi-organ development via the instructive mesenchymal-epithelial interactions. FGF-10 is crucial for lung and limb development, and is regulated by Shh during early development. Recombinant human Fibroblast Growth Factor-10 (rhFGF-10) with N-terminal His-tag produced in E. coli is a single non-glycosylated polypeptide chain containing 187 amino acids. A fully biologically active molecule, rhFGF-10 has a molecular mass of 21.4 kDa analyzed by reducing SDS-PAGE and is obtained by proprietary chromatographic techniques at GenScript.

Molecular Weight:

21.4 kDa, observed by reducing SDS-PAGE.

Purity:

> 95% by SDS-PAGE analysis.

Biological Activity:

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

Physical Appearance:

Sterile Filtered White lyophilized (freeze-dried) powder.

Formulation:

Lyophilized after extensive dialysis against PBS.

AA Sequence:

MNHKVVHHHHHMDDDDKMLGQDMVSPEAT-
NSSSSSFSSPSSAGRHVRSYNHLQGDVR-
WRKLSFTKYFLKIEKNGKVSSTKENCPSIL-
EITSVEIGVVAVKAINSYYLAMNKKGKLYG-
SKEFNNDCKLKERI-
EENGYNTYASFNWQHNGRQMYVAL-
NGKGAPRRGQKTRRKNTSAHFLPMVVHS

Endotoxin:

< 0.2 EU/μg, determined by LAL method.

Reconstitution:

Reconstituted in ddH₂O at 100 μg/mL.

Storage:

Lyophilized recombinant human Fibroblast Growth Factor-10 (rhFGF-10) remains stable up to 6 months at -80 °C from date of receipt. Upon reconstitution, rhFGF-10 should be stable up to 2 weeks at 4 °C or up to 3 months at -20 °C.

Usage:

This material is offered by USA Bioworld biotech for research, laboratory or further evaluation purposes. For research use only.