

PRODUCT DATA SHEET



Bioworld Technology, Inc.

Recombinant FGF-10, Human

Catalog Number: BK0033-1mg

Source: Escherichia coli.

Quantity: 1mg

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.

Molecular Weight:

19.3 kDa, observed by reducing SDS-PAGE.

Purity:

> 95% as analyzed by SDS-PAGE.

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.

Physical Appearance:

Sterile Filtered White lyophilized (freeze-dried) powder.

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Formulation:

Lyophilized after extensive dialysis against PBS.

AA Sequence:

LGQDMVSPEATNSSSSSFSSPSSAGRHVRSYN-
HLQGDVWRKLFSTKYF
LKIEKNGKVSGETKKENCYPYSILEI-
TSVEIGVVAVKAINSNYLLAMNKKGK
LYGSKEFNNDCKLKERI-
EENGYNTYASFNWQHNGRQMYVAL-
NGKGAPRRG
QKTRRKNTSAHFLPMVVHS

Endotoxin:

< 0.2 EU/μg, determined by LAL method.

Reconstitution:

Reconstituted in ddH₂O at 100 μg/ml.

Storage:

Lyophilized recombinant Human FGF-10 remains stable up to 6 months at -80 °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.

Usage:

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