

PRODUCT DATA SHEET



Bioworld Technology, Inc.

Recombinant FGF-16, Human

Catalog Number: BK0199-50µg

Source: CHO

Quantity: 50µg

Description:

Fibroblast Growth Factor-16 (FGF-16) is a heparin binding growth factor, a member of the FGF family. All FGF family members are heparin binding growth factors with a core 120 amino acid (aa) FGF domain that allows for a common tertiary structure. FGF family members possess broad mitogenic and cell survival activities, and are involved in a variety of biological processes, including embryonic development, cell growth, morphogenesis, tissue repair, tumor growth and invasion. The rat homolog is predominantly expressed in embryonic brown adipose tissue and has significant mitogenic activity, which suggests a role in proliferation of embryonic brown adipose tissue. FGF-16 is most similar to FGF-9 (73 % amino acid identity). The protein sequence of human FGF-16 displays 98.6% identity with rat FGF-16. Chimpanzee FGF-16 (207 amino acids), chicken FGF-16 (207 amino acids), and zebrafish FGF-16 (203 amino acids) show 100 %, 89.9 %, and 79.2 % total amino acid identity with human FGF-16. Recombinant human FGF-16 produced in CHO cells is a polypeptide chain containing 206 amino acids. A fully biologically active molecule, rhFGF-16 has a molecular mass of 23 kDa analyzed by reducing SDS-PAGE and is obtained by chromatographic techniques at GenScript.

Molecular Weight:

23 kDa, observed by reducing SDS-PAGE.

Purity:

> 95% as analyzed by SDS-PAGE and HPLC.

Biological Activity:

Measured in a cell proliferation assay using 3T3 mouse fibroblast cell, The ED50 for this effect is < 20 ng/mL.

Physical Appearance:

Sterile Filtered White lyophilized (freeze-dried) powder.

Formulation:

Lyophilized after extensive dialysis against PBS.

AA Sequence:

AEVGGVFASLDWDLHGFSSSLGNVPLAD-
SPGFLNERLGQIEGKLQRGSPTDFAHLKGIL-
RRRQLYCRT-
GFHLEIFPNGTVHGRHDHSRFGILE-
FISLAVGLISIRGVDSGLYLGMNERGELYG-
SKKLTRECVFREQFEENWYNTYAST-
LYKHSDSERQYYVALNKDG-
SPREGYRTRKHQKFTH-
FLPRPVDPSKLPMSRDLFHYR

Endotoxin:

< 0.2 EU/µg, determined by LAL method.

Reconstitution:

Reconstituted in ddH₂O or PBS at 100 µg/ml.

Storage:

Lyophilized recombinant Human Fibroblast Growth Factor-16 remains stable up to 6 months at -80 °C from date of receipt. Upon reconstitution, Human Fibroblast Growth Factor-16 should be stable up to 1 week at 4 °C or up to 3 months at -20 °C.

Usage:

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