

PRODUCT DATA SHEET



Bioworld Technology, Inc.

Recombinant FGF-acidic, Mouse

Catalog Number: BK0052-10 μ g

Source: Escherichia coli.

Quantity: 10 μ g

Description:

Fibroblast Growth Factor- acidic (FGF-acidic) is a mitogen targeting at the endothelial cells, and belongs to the heparin binding FGF family, which contains 22 members. FGF-acidic binds to the receptor family FGFR1-4 in vivo with the assistance of heparin. However, along with FGF -basic, FGF-acidic lacks the signal peptide segment, and thus is not secreted via endoplasmic reticulum (ER) and Golgi bodies. Studies have shown that FGF-acidic is highly regulated, and it is a direct angiogenesis factor. If unregulated, angiogenesis could contribute to several diseases including arthritis, diabetes, ocular neovascularization, and especially tumors. Therefore, FGF-acidic is treated as a potential oncogene, and its overexpression is correlated tightly with several cancers. Recombinant mouse Fibroblast Growth Factor- acidic (rmFGF-acidic) produced in E.coli is a single non-glycosylated polypeptide chain containing 140 amino acids. A fully biologically active molecule, rmFGF-acidic has a molecular mass of 15.8 kDa analyzed by reducing SDS-PAGE and is obtained by proprietary chromatographic techniques at GenScript.

Molecular Weight:

15.8 kDa, observed by reducing SDS-PAGE.

Purity:

> 95% by SDS-PAGE and HPLC analyses.

Biological Activity:

ED50 < 0.4 ng/mL, measured by a cell proliferation assay using 3T3 cells in the presence of 10 μ g/mL heparin, corresponding to a specific activity of > 2.5 \times 10⁶ units/mg.

Physical Appearance:

Sterile Filtered White lyophilized (freeze-dried) powder.

Formulation:

Lyophilized after extensive dialysis against PBS.

AA Sequence:

FNLPLGNYKKPKLLYCSNGGHFL-
RILPDGTVDGTRDRSDQHIQLQLSAESAGEVY-
IKGTETGQYLAMDTEGLLY-
GSQTPNEECLFLERLEENHYNTY-
TSKKHAEKNWVGLKKN-
SCKRGPRTHYGQKAILFLPLPVSSD

Endotoxin:

< 0.2 EU/ μ g, determined by LAL method.

Reconstitution:

Reconstituted in ddH₂O at 100 μ g/mL.

Storage:

Lyophilized recombinant mouse Fibroblast Growth Factor- acidic (rmFGF-acidic) remains stable up to 6 months at -80 $^{\circ}$ C from date of receipt. Upon reconstitution, rmFGF-acidic should be stable up to 2 weeks at 4 $^{\circ}$ C or up to 3 months at -20 $^{\circ}$ C.

Usage:

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