

PRODUCT DATA SHEET



Bioworld Technology, Inc.

Recombinant FGF-basic, Rat

Catalog Number: BK0058-1mg

Source: Escherichia coli.

Quantity: 1mg

Description:

Fibroblast Growth Factor-basic (FGF-basic), also known as FGF-2, is a pleiotropic cytokine and one of the prototypic members of the heparin-binding FGF family. Like other FGF family members, FGF-basic has the β trefoil structure. In vivo, FGF-basic is produced by a variety of cells, including cardiomyocytes, fibroblasts, and vascular cells. FGF-basic regulates a variety of processes including cell proliferation, differentiation, survival, adhesion, motility, apoptosis, limb formation and wound healing. FGF-basic can be tumorigenic due to its role in angiogenesis and blood vessel remodeling. The angiogenic effects of FGF-basic can produce beneficial cardioprotection during acute heart injury. Recombinant rat Fibroblast Growth Factor-basic (rrFGF-basic) produced in E.coli is a single non-glycosylated polypeptide chain containing 146 amino acids. A fully biologically active molecule, rrFGF-basic has a molecular mass of 16.4 kDa analyzed by reducing SDS-PAGE and is obtained by proprietary chromatographic techniques at GenScript.

Molecular Weight:

16.4 kDa, observed by reducing SDS-PAGE.

Purity:

> 95% by SDS-PAGE analysis.

Biological Activity:

ED50 < 0.25 ng/mL, measured by a cell proliferation assay using 3T3 cells, corresponding to a specific activity of $> 4 \times 10^6$ units/mg.

Physical Appearance:

Sterile Filtered White lyophilized (freeze-dried) powder.

Formulation:

Lyophilized after extensive dialysis against PBS.

AA Sequence:

GPALPEDGGGAFPPGHFKDPKRLYCKNGGFFL-
RIHPDGRVDGVREKS-
DPHVKLQLQAEERGVSIVKVCANRYLAMKED-
MKEDGRLASKCVTEECFFFERLESNNYNTYRS-
GRLASKCVTEECFFFERLESNNYNTYRS-
RKYSSWYVALKRTGQYKLGSKTGPQKAIL-
FLPMSAKS

Endotoxin:

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

Reconstitution:

Reconstituted in ddH₂O at 100 μ g/mL.

Storage:

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

Usage:

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