

PRODUCT DATA SHEET



Bioworld Technology, Inc.

Recombinant FGF-8c, Mouse

Catalog Number: BK0046-1mg

Source: Escherichia coli.

Quantity: 1mg

Description:

Fibroblast Growth Factor 8c (FGF-8c) is a cytokine belonging to the heparin-binding FGF family, which has at least 23 members. In different species, e.g. human and mouse, FGF-8 has 8 different isoforms, from FGF-8a to FGF-8h. Different FGF-8 isoforms have different affinities to the receptors, thus conduct different signaling cascade pathways. FGF-8 has very widespread expression pattern during embryonic development, and is an organizer and inducer for gastrulation, somitogenesis, morphogenesis, and limb induction. However, FGF-8 is also a potential oncogene: in normal adult cells, FGF-8 has very low expression; on the other hand, FGF-8 is highly expressed in cancer cells of breast, prostate, and ovarian tumors. FGF-8 promotes tumor angiogenesis by increasing neovascularization, and induces osteoblastic differentiation. Recombinant mouse Fibroblast Growth Factor 8c (rmFGF-8c) produced in E.coli is a single non-glycosylated polypeptide chain containing 247 amino acids. A fully biologically active molecule, rmFGF-8c has a molecular mass of 28.2 kDa analyzed by reducing SDS-PAGE and is obtained by proprietary chromatographic techniques at GenScript.

Molecular Weight:

28.2 kDa, observed by reducing SDS-PAGE.

Purity:

> 95% by SDS-PAGE and HPLC analyses.

Biological Activity:

ED50 < 150 ng/mL, measured by a cell proliferation assay using 3T3 cells, corresponding to a specific activity of > 6.7 × 10³ units/mg.

Physical Appearance:

Sterile Filtered White lyophilized (freeze-dried) powder.

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Formulation:

Lyophilized after extensive dialysis against PBS.

AA Sequence:

MQVRSAAQKRGPAGNPAD-
TLGQGHEDRPFQQRSRAGKNFTNPAPNY-
PEEGSKEQRDSVLPKVTQRHVREQSLVTDQLSRR
LIRTYQLYSRTSGKHVQVLANK-
RINAMAEDGDPFAKLIVETDTEFGS-
RVRVRGAETGLYICMNKKGKLIK-
SNGKGKDCVFTEIVLENNYTALQNAKYEG-
WYMAFTRKGRPRKGSKTRQHOREVHFMKRL-
PRGHHTTEQSLRFEFLNY-
PPFTRSLRGSQRTWAPEPR

Endotoxin:

< 0.2 EU/μg, determined by LAL method.

Reconstitution:

Reconstituted in ddH₂O at 100 μg/mL.

Storage:

Lyophilized recombinant mouse Fibroblast Growth Factor 8c (rmFGF-8c) remains stable up to 6 months at -80 °C from date of receipt. Upon reconstitution, rmFGF-8c should be stable up to 2 weeks at 4 °C or up to 3 months at -20 °C.

Usage:

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